

**PAINTED POTTERY OF THE FIRST HALF OF  
THE EARLY BRONZE AGE  
(LATE 4<sup>TH</sup> – FIRST CENTURIES OF  
THE 3<sup>RD</sup> MILLENNIUM BC) IN LURISTAN, W-IRAN**

BY

Ernie HAERINCK  
(Ghent University)

**Abstract:** The painted pottery of the first half of the Early Bronze Age in Luristan (Pusht-i Kuh and Pish-i Kuh) is rather badly documented. Most information comes from grave-contexts, although on the whole the information is limited. Two main categories are to be distinguished: a bichrome/polychrome as well as a monochrome group. There are distinct regions with a different pottery tradition. Evidence from Susa, Godin Tepe and other sites is included, as well as information provided by Mesopotamian sites. An attempt is being made to outline the regional diversity and a chronology is proposed.

**Keywords:** Luristan, W-Iran, Early Bronze Age, painted pottery, polychrome pottery, monochrome pottery

The painted pottery of the late 4<sup>th</sup>/first centuries of the 3<sup>rd</sup> millennium BC in Luristan has not received much attention so far. However, at a meeting in Paris in 1984, Elizabeth Carter (1987) and myself (1987) presented some thoughts on this kind of material.

The very limited evidence available for this vast region in the western Zagros mountains can explain this lack of interest. Even 25 year after the Paris conference not much new material has been published. Most attention has been given to the later part of the Early Bronze Age and the Middle Bronze Age, due to the large scale excavations at Tepe Giyan, in Nehavand, and at Godin Tepe, in the Kangavar region. Tepe Giyan lies on the northern fringes of Luristan, while Godin Tepe lies outside Luristan. Very limited research was done in the region more to the South that actually belongs to Luristan proper.

The blurred picture of the archaeology of Luristan is due to the less hospitable mountainous character of vast parts of this region, where large

groups of the population were nomadic tribal. Political constraints were involved as well since the resistance of the local population to the central government made it for long time rather hazardous to travel in the region. Logistical problems such as lack of roads made each attempt to do research in this region equally difficult. Furthermore, the locals were reluctant to allow foreigners enter their territories since the large scale plundering of the numerous graveyards provided them also some means of income. They preferred to keep the knowledge on the location of sites for themselves. Eventual travellers were also sometimes misguided or given wrong information.

Luristan is a pivotal region between the Mesopotamian and Elamite civilisations and the Iranian Plateau. Research in this region could help clarify several historical and archaeological issues. In this article it is our intention to bring forward a status quaestionis and some prospects for regional classification and dating of painted pottery in the first half of the Early Bronze Age.

We present here a quick overview of the major research that took place in Luristan (for bibliography see: Vanden Berghe, De Wulf & Haerinck 1979: 116-129; Vanden Berghe & Haerinck 1981: 37-40; Vanden Berghe & Haerinck 1987: 40-43; Haerinck & Stevens 1996: 50-54; Haerinck & Stevens 2005: 54-57). In the 19<sup>th</sup> century both H.C. Rawlinson and J. de Morgan travelled through some parts of Luristan, but provided mainly information on visible ruins of the Sasanian or other periods. The earliest research in Deh Luran, the most southern part of Pusht-i Kuh (province Ilam) took place in the late 19<sup>th</sup>/ early 20<sup>th</sup> century by J.E. Gautier & G. Lampre. This research was linked to the French program in Susiana. Only in the '60 and '70's Frank Hole, K. Flannery & J.A. Neely, initiated research in Deh Luran followed by Henry T. Wright.

In the late '20's and '30's Ernst Herzfeld, André Godard (mainly in the Dasht-i Khava valley) and Freya Stark (Dilfan, Khava, Alishtar and parts of the Pusht-i Kuh) ventured in different parts of Luristan, trying to get some information from the locals, without excavating, concerning the by that time already well known enigmatic "Luristan Bronzes". The first excavations took place by Ehrich Schmidt during "The Holmes Luristan Expedition" in the mid '30's. This expedition excavated in different parts of the Pish-i Kuh (such as in Rumishgan and Kuh-i Dasht). Also in the '30's Aurel Stein travelled through parts of Luristan and made test-trenches

on several sites. Equally in the 30's G. Contenau and R. Ghirshman undertook large-scale excavations at Tepe Giyan. From the '60's onwards some more scholars ventured in the region. Clare Goff made extensive surveys in Pish-i Kuh and excavated at Baba Djan. The prehistoric Kunji cave contained equally burials of the Early Bronze Age and was excavated by John D. Speth in 1969.

A Danish expedition by Jorgen Meldgaard, Henrik Thrane and Peder Mortensen concentrated on research in the Hulailan valley, while Louis Levine surveyed the Mahi Dasht. A Belgian expedition, directed by Louis Vanden Berghe undertook surveys and excavations on numerous burial grounds in Pusht-i Kuh, between 1965 and 1979. After the Islamic Revolution of 1979 an Iranian team excavated at the site of Nurabad, and in 2005 a dig was initiated on a major Iron Age site at Sangtarashan, in the Dorud area. Furthermore, different Iranian teams undertook surveys in Luristan, but all these remain unpublished.

The material that can be studied is thus limited and fragmentary. This vast region of Luristan, extending some 350 km from West to East and some 200 km from North to South, is badly documented. However, with the evidence at hand we shall try to shed some light on the distribution pattern and chronological developments of painted ceramics in the early phases of the Early Bronze Age.

It is clear that Luristan was certainly not a region with a uniform pottery production. In the Pusht-i Kuh, we can distinguish three different pottery cultures during the first half of the 3<sup>rd</sup> millennium (fig. 1).

In Pish-i Kuh the picture is less clear for this period due to the limited available information. For the Pish-i Kuh the part North of Khorramabad is not documented for the period of our concern. Later in the Bronze Age, an almost uniform pattern is evident with painted Godin III wares of the 2<sup>nd</sup> half of the 3<sup>rd</sup> millennium and larger part of the 2<sup>nd</sup> millennium BC being widely distributed over the Pish-i Kuh.

Most information on the early 3<sup>rd</sup> millennium is provided by a few excavations on small settlements, but mainly by individual graves (so far mainly known in Pusht-i Kuh), and by large, communal stone built graves of different types. The latter, with multiple, successive interments make it of course difficult and even impossible to ascribe specific burial goods to a specific individual. We have to realise that these graves may have been used by different generations, spanning sometimes several centuries. Also, some tombs have been re-used at a much later date.



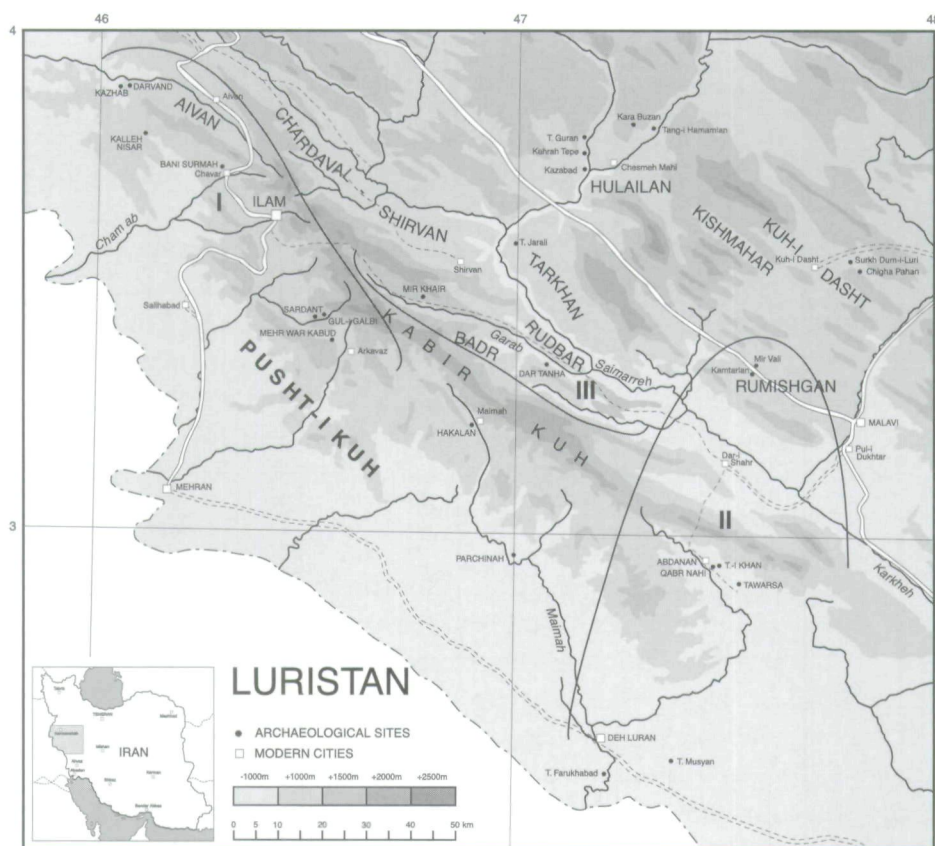


Fig. 1. Map of Luristan with the three pottery regions in Pusht-i Kuh during the first half of the 3<sup>rd</sup> mill. BC.

In many cases too, we have to rely on external evidence to be able to provide a dating for objects or pottery.

In the painted pottery of the late 4<sup>th</sup>/first half of the 3<sup>rd</sup> millennium BC there are two large groups to be distinguished: bichrome/polychrome wares and monochrome painted wares. In this contribution we shall try to sketch the evolution and differences in pottery distribution from the different regions of Pusht-i Kuh and Pish-i Kuh.

We are grateful to Mr. Erik Smekens who took care of all illustrations.



### **Bichrome/polychrome painted pottery**

Painting is applied after firing and is thus unstable and rarely well preserved. The fugitive paint is blackish brown and red. Sometimes the vessels were first covered with a whitish to buff slip. In that case we could really call it a polychrome ware. In other cases the paint is applied on an unslipped surface and the term "bichrome pottery" can be used. Mostly there is not enough detailed information available on the characteristics of the vessels and a clear distinction is impossible.

#### *Western Pusht-i Kuh (Pl. 2-3)*

The Middle Chalcolithic in Pusht-i Kuh is represented by the graveyards of Parchinah and Hakalan (Haerinck & Overlaet 1996). However, we have no clear idea how long the so called Middle Chalcolithic phase lasted in Pusht-i Kuh and how long it continued or did overlap with late Chalcolithic in other regions. Both sites belong to the southern Pusht-i Kuh. We have no information on the Chalcolithic period to the West of Maimah (approx. 70 km to the SE of Ilam). Middle and Late Chalcolithic pottery is available from Mahi Dasht (Levine & Young 1987: 33 & 35-39) and the region of Shahabad/Islamabad (Abdi e.a. 2002 & 2003).

As far as we can see Late Uruk with its typical pottery shapes is not present in Pusht-i Kuh. Hamrin provides a similar picture with almost no Uruk remains (Moon 1986: 112; Porada e.a. 1992: 96). It could well be that the population from the mountainous or less fertile regions were attracted by the growing larger villages and cities of the plains with a booming economy. The movement of populations or drain could result in an almost total desertion of certain, less advantaged regions. Though, the Uruk period (=Late Chalcolithic) is represented in other parts of Luristan, such as Deh Luran, the Mahi Dasht/Kermanshah, the Hulailan valley, Kunji Cave at Khorramabad, Baba Djan V, Tepe Giyan and Godin Tepe V (Voigt & Dyson 1992: 128, 156, 158, 161-162). Elizabeth Henrickson (1994) stated that concentrations of Uruk material was only to be found along strategic access routes into the Zagros and suggested that this phenomenon was linked to commerce in high-value luxury items.

After the collapse of the Uruk system, Hamrin was resettled and this was most likely also the case of Pusht-i Kuh. The Diyala provides a slightly different picture, but has known a similar trend. Surveys and excavations

have shown that at (or before) the end of the Uruk period a large number of smaller sites was abandoned, possibly as a result of the major social disruption towards the end of the Uruk period. The larger sites remained occupied however and some new sites were established as well in post-Uruk times (Postgate 1986: 93, 96, 102, fig. 6). Postgate (1986: 93) notes that *"At the transition from ĜN to ED I, therefore, the newly founded sites must be taken as a token of prosperity and peace. On the other hand the Uruk to ĜN transition can be seen as a time in which rural settlement in these areas was severely disrupted, with village population killed, driven away altogether, or confined in the cities"*.

To the late 4<sup>th</sup> millennium BC probably still belongs the material excavated at **Mir Khair**, in Badr region (Pl. 14) (see further). A date of ca. 3100-3000 BC is suggested for the material from Mir Khair. There is, however, no firm evidence at hand to affirm the presence of this pottery style in western Pusht-i Kuh. Though, small tombs with stone floor at Andjireh, 18 km south of the village of Gulgul, belong maybe to the same horizon (Haerinck & Overlaet 2010a: 48-49, Pl. 28).

Besides Andjireh, the other earliest Bronze Age remains found by the Belgian team to the West of Arkavaz and Ilam are burial goods from small tombs at **Kalleh Nisar AI** (Haerinck & Overlaet 2008) (Pl. 2). At Kalleh Nisar, some 35 to 40 km to the W of Ilam, and some 70 to 80 km, as the crow flies, to the W. of Mir Khair there were 19 small graves excavated in area AI, but most of them have been reused at a later date, even as late as the first half of the 2<sup>nd</sup> millennium BC. The tombs are probably of similar date as late Djemdet Nasr in S-Mesopotamia or Protoliterate d (Protoliterate d is likely equivalent to Early Dynastic I in southern Mesopotamia: see Wilson 1986: 65-66; Porada, Hansen, Dunham & Babcock 1992: 101, 107) and Early Dynastic I in the Diyala. A tentative attribution to late Djemdet Nasr/Protoliterate d and early Early Dynastic I (=Early Bronze Age I in Pusht-i Kuh) or a date 3000-2800 BC is suggested for the small tombs at Kalleh Nisar AI.

These tombs at Kalleh Nisar contained quite a lot of bichrome/polychrome vessels with a blackish brown and red fugitive painting (Pl. 2) (Haerinck & Overlaet 2008: 30, fig. 12). All vessels found in AI (except one: AI.19-1, with the depiction of a bovine with birds sitting on its back on the lower part of a vessel) are decorated with geometric motifs (Pl. 2: 2-13). This decoration is mostly confined to the upper half or upper three-quarter of the vessel. This could likely point to a Djemdet Nasr date in



South Mesopotamia or to Protoliterate d in the Diyala/Hamrin (Fujii 1981: fig. 11 & 12: T. Gubba level VII).

One type in Kalleh Nisar AI is a smaller squat jar (Pl. 2: 2-7). These small jars are slightly carinated, but more often show a rounded shoulder and body, a broad neck and a flat or slightly convex bottom. They are reminiscent of the jars at Mir Khair (see Pl. 14).

A couple of jars with carinated shoulder and a rather high body do have a ridge around the neck (Haerinck & Overlaet 2008: AI.7-1, 11-2, 11-3 and 18-1, fig. 12:9 and 16-18, colour Pl. XIV-XV, XVIII) (Pl. 2: 11-13). This ridge is seemingly an indicator of Early Dynastic I pottery in the Diyala and the Hamrin (Delougaz 1952: 61; Thuesen 1981: pl. 80 n° 1; Fujii 1981: fig. 14; Eickhoff 1993: Abb. 42 n° 84, Abb. 43 n° 95). It is also present on some vessels from Bani Surmah (Pl. 3:2, 5) (Haerinck & Overlaet 2006: 28, tombs B11-1, B12-1 & 2).

A couple of sherds from AI tombs have a (pseudo-) wing-tip handle (Pl. 2: 9-10) (Haerinck & Overlaet 2008: fig. 12:10 and 19, colour pl. XVI) (see also Bani Surmah cooking ware: Haerinck & Overlaet 2006: 16, fig. 3 n° 16-17). This kind of handle equally points to an Early Dynastic I date in the Diyala (Delougaz 1952: 57-58; 65-68, pl. 9, 11, 12, 47, 55-57) and the Hamrin (Forest 1980: 218, fig. 5; Fujii 1981: 36, fig. 14 n° 1, 3; 44, fig. 20 n° 6; Tünça 1987: Pl. 64, 65; Eickhoff 1993: Pl. 41, n° 81). Some of these lugs are reminiscent of or are related to the distinctive Mesopotamian lug. A few resemble them even very closely. An "undeniably" Mesopotamian wing-tip handle was observed on a vessel found during rescue excavations at Ilam (Haerinck & Overlaet 2010b). This type of lug is also known from Southwest Iran. It is present at Farukhabad (Wright 1981: pl. 53a: level B23, to be dated in ED I, see Carter 1987: 75; Haerinck 1987: 64 and Neely & Wright 1994: 5, 28, 30) and at Aliabad in the Deh Luran (Pl. 10:6) (Gautier & Lampre 1905: 141, fig. 285; Carter 1987: 77, fig. 2) and even at Susa (Pl. 11:1) (Le Breton 1957: pl. XXVI; Carter 1987: 77, fig. 2).

To a slightly later phase, but probably still in Early Dynastic I and in Early Dynastic II (=Early Bronze Age II in Pusht-i Kuh), belong the vessels with animals set in metopes (caprids, but most likely bovines with or without birds sitting on the back; stylised vegetation) (Pl. 3). This decoration figures on the lower part of the vessel. On the upper part there are mainly geometric motifs. They mostly do have ring bases. Vessels of this type were found at **Bani Surmah** (Haerinck & Overlaet 2006: 29, fig. 12) and



**Kalleh Nisar** (Haerinck & Overlaet 2008: fig. 13) mainly in the larger tombs.

This type of decoration is of course very similar to that on scarlet ware vessels from the Hamrin and the Diyala of Early Dynastic I or II date. A polychrome vessel with painted animals on the shoulder from **Chogha Maran** (Mahi Dasht, W-Iran) (Pl. 4) most likely belongs to the same cultural and chronological horizon as Bani Surmah and Kalleh Nisar (Levine & Young 1987: 46 fig. 26; 48-50). The relationship of the Pusht-i Kuh vessels from region I to those from the Hamrin and the Diyala is striking and testifies once again to the close contacts and ties between these regions. Some of the painted polychrome ware from Kalleh Nisar and Bani Surmah and from other sites along the southern flanks of the Kabir Kuh (Chavar area: Bani Sol; Arkavaz area: Mihr War Kabud and Shatt-i Siah Safalaki; Salihabad area: Cheshmeh-i Takht-i Khan: Haerinck & Overlaet 2010a) could be imported from Mesopotamia. Others were perhaps produced in W-Iran or the Pusht-i Kuh and are to be considered as imitations of the Mesopotamian production. An influence from northwest Pusht-i Kuh on Mesopotamia seems less likely in view of the numerous items from Mesopotamia (such as seals, shells, pottery ...), which found their way into the rugged countryside of Luristan. However, it could be suggested that the animal representations on the polychrome vessels from the Diyala and the Hamrin could ultimately derive from an Iranian influence, since zoomorphic motifs are common in Iran during many periods.

Scarlet ware in Mesopotamia seems to be characteristic for Early Dynastic I and II. However, a few vessels also turned up in Early Dynastic III/Akkadian funerary contexts but these are quite different. They belong to one particular type of jar. They all have an upright, rectangular handle on the shoulder, sometimes linking the rim to the shoulder (see Diyala: Delougaz 1952: 83 (e.g. spouthandle), 87-90; Gubba: Fujii 1981, fig. 21 n° 2; Gibson e.a. 1981, pl. 95 n° 2, 98 n° 10; Tell Sabra: Tünça 1987, pl. 19 n° 2 and Chokha: Rumaïdh 2000, pl. 22, p. 45 n° 1 and 6). No such vessels were attested in Pusht-i Kuh. We do, however, not want to exclude the possibility that in Pusht-i Kuh "scarlet ware" continued for some time beyond Early Dynastic II, even if there is for the moment no real proof.

*Deh Luran-Abdanan-Rumishgan (Pl. 5-11 top row)*

The chronological position of most tombs in Luristan remains a matter of debate. However, most scholars would agree with a date somewhere in

the first half of the 3<sup>rd</sup> millennium BC. for the tombs in Abdanan region. Where exactly in this period remains to be seen. With little evidence at hand we suggest a basically Early Dynastic II eventually continuing into Early Dynastic IIIA date for these tombs (=Early Bronze Age II/III in Pusht-i Kuh). Far more excavations of well stratified settlements and good burial contexts are needed. This is a wish often expressed in archaeological literature, but for Luristan this is certainly true.

Vessels of the so called "Mussian" style can be found in Deh Luran, Abdanan and Rumishgan", whereas the "arc and ray"/"rising sun"/"Aliabad" pottery has so far only been attested in Deh Luran. A couple of vessels of both styles were excavated at Susa where they are likely imports from the highlands.

*"Mussian" style (Pl. 5-9)*

A major polychrome style consists of rather large vessels (between 20 to 35 cm or more in height), mainly ovoid shaped. It can be considered as a regional variant of scarlet pottery of more or less the same time range. W. Nagel (1964: Taf. 28-29) calls this style the "Proto-Susa II-Keramik". This pottery is attested in Abdanan, Rumishgan and Deh Luran. Some examples were also found at Susa.

Large jars are the most characteristic vessels, although a few other shapes do exist. These jars have a rather broad but low concave neck, and a quite bulbous or oval body on a ring base. Also typical is the presence of a ridge on the transition from neck to shoulder or from shoulder to body. There can be single or double ridges from the shoulder to the body. Vertical plastic ridges can occur on the shoulder too (pl. 5:5-7; Pl. 6; Pl. 9:1), and are also found on unpainted jars of the same profile (see also Pl. 17:2; Pl. 18). Painting, applied after firing is usually of a bright red; black is mainly used for some geometrical patterns and for bordering the red motifs. The decoration is in most cases very finely and carefully done. The outlines of the animals are black and filled in with red.

The Diyala/Hamrin and western Pusht-i Kuh (e.g. Bani Surmah, Kalleh Nisar ea.) scarlet style mainly has figurative decoration with animals with long curving horns and birds on their back, on the lower part of the vessel, set in metopes. The SW-Iranian "Mussian" style shows a very similar decoration but with the decoration on the shoulder of the vessels. Usually the animals have very elongated bodies. Branches/trees are very common. In both styles similar geometric designs do occur. Although both styles are



quite similar they are still easy to distinguish. In both regions the colours for painting are black and red.

In the Abdanan region this pottery was attested in large, communal graves at **Qabr Nahi**, **Takht-i Khan**, **Pusht-i Qaleh Abdanan** and **Tawarsa**. Several of the tombs contained also monochrome painted pottery (Pl. 12) and some common buff ware vessels with finger-impressed decoration on the base (eg. Susa: Steve & Gasche 1971: Pl. 14 n° 7, 12-16, Pl. 19 n° 36; Carter 1980: 83, fig. 27 n° 3; Godin Tepe III:6: Henrickson 1987: 44, 91 fig. 9 n° 2). Whether all these pottery groups are chronologically of the same period is impossible to confirm with the evidence at hand.

Besides the sites in the Abdanan region, a vessel of this "Mussian" type with animal decoration was equally found in 1935 at **Mir Vali** (Pl. 9:1), in Rumishgan (southern Pish-i Kuh, to the North of the Saimarreh) by the team of Ehrich Schmidt (Schmidt, van Loon & Curvers 1989: 31, pl. 79 g & h; pl. 81 b, c, d & g, pl. 83 d; 85 b, pl. 86 c, pl. 89). It was discovered in tomb II (stone cist; 2.40×1.00×0.45 m; no roof preserved; objects in northern part of the tomb) together with some ten monochrome painted vessels (Pl. 13: 2-9). No vessels with finger-impressed decoration on the base were found in the Mir Vali tomb.

In tomb IV, equally at Mir Vali, another vessel (probably) with monochrome painting is related to the Mussian style (Pl. 9:2). It is a large ovoid jar with a reddish brown paint with eg. branches/trees on the shoulder. It was found in a stone cist (3.50 x 1.60 x 1.15 m; with a flat roof) together with unpainted and monochrome painted vessels (Pl. 13:1), two silver rings, two copper/bronze pins and some beads (Schmidt, van Loon & Curvers 1989: 32, pl. 79 e, i & p; pl. 81 i, j, k, l; pl. 86 a; pl. 87 b; pl. 88 b, pl. 119 e, f, m, n & l; pl. 130 a).

Similar vessels of "Mussian" style are seemingly absent in the Badr and Shirvan-Chardaval regions, to the N and NW of the Kabir Kuh. As far as can be seen now this type is shared by the regions of Rumishgan, Abdanan and Deh Luran, whereas the "arc and ray or rising sun" (=Aliabad) style is confined to Deh Luran only.

The largest stratified sample of the "Mussian" ware comes from the site of **Farukhabad** (Pl. 7:4; 8:2-8), in Deh Luran (Wright 1981: A3: pl. 61 e & c; A5: pl. 1, pl. 61 I; A6: pl. 59 a, 59 g, 60 g & 61 g; A9/10: pl. 60 f, pl. 61 I; A11: pl. 59 n; A12: pl. 59k/ B21: pl. 61 a; B22: pl. 60 e; B23: pl. 59 m, pl. 60 c; B22-23: pl. 60 a; levels now mainly dated in Early Dynastic I, but continuing in Early Dynastic II, though the latter levels did



not contain much diagnostic material: Neely & Wright 1994: 19, 28-30, fig. III.9e; Carter 1987: 76, fig. 1 c, d & g).

Prior to the research at Farukhabad a French team organised excavation on some sites in the Deh Luran. Painted wares of the type under discussion here were found at **Tepe Khazineh** (Pl. 8:1) and **Tepe Aliabad** (Pl. 7:3) (Gautier & Lampre 1905: 129, fig. 250-251, Carter 1987: 76 fig. 1a), on sites with tombs belonging to the late fourth/early 3<sup>rd</sup> millennium. The publication contains unfortunately no precise and detailed information. However, one vessel (Gautier & Lampre 1905: 141-142, Pl. VII; Carter 1987: 76, fig. 1a) was found in the rectangular mud brick tomb A (this tomb has most likely only partially been excavated; cf. sites with similar mud brick tombs in Hamrin equally of Early Dynastic I date: Forest 1980; Sørenhagen 1981; Eickhoff 1993) that contained a variety of vessels, as well as two small alabaster double vessels, a door socket ...

Further to the South, some rare vessels of this style were found at **Susa** (Pl. 7:1-2) (Pottier 1912: 48 fig. 168; Le Breton 1957: Pl. XXVI n° 11; Amiet 1966: 137; Steve & Gasche 1971: pl. 16 n° 1, Locus 234: jar with no figurative painting (this vessel could be a heirloom: Henrickson 1986: 29, note 19; Haerinck 1987: 64; Carter 1987: fig. 2c&d; Dittmann 1987: 47, Abb. 8,5), found in association with monochrome wares and finger impressed bases (see also Carter 1987: 77, fig. 2d).

Most vessels of the polychrome group from Abdanan have a horizontal ridge on the transition from neck to shoulder and one or two on the transition from shoulder to body or on the middle part of the vessel (Pl. 5:5-8, 6). The presence of multiple ridges could eventually point to a rather late date in the development of this style (Delougaz 1952: 80, 141 of Early Dynastic II date, though they are present already in Early Dynastic I; Thuesen 1981: 104-105; Carter 1987: 80).

A single ridge on the transition from shoulder to body occurs at Khazineh and Aliabad (Pl. 7:3) (Gautier & Lampre 1905: 129, fig. 250, 251, Pl. VII), Farukhabad (Pl. 7:4) (Wright 1981: level A5, pl. 1; level A6: pl. 58e; levels A9/10: pl. 61, 1; level B21: pl. 61 a), at Susa (Pl. 7:1-2) (Le Breton 1957: pl. XXVI n° 11; Amiet 1966: 137; Carter 1987: 77, fig. 2d) and also at Mir Vali (Pl. 9), in Rumishgan (Schmidt, van Loon & Curvers 1989: pl. 89).

Another characteristic of the Abdanan vessels (Pl. 5:5,7,8; Pl. 6), but also of the vessel from Mir Vali (Schmidt, van Loon & Curvers 1989: pl. 89) is the presence of some vertical ribs on the shoulder part. This element is

probably not attested on the Deh Luran or Susa examples of this painted style. However, an undecorated vessel with these ribs was found in the Deh Luran, on an unspecified site (Gautier & Lampre 1905: 137, fig. 275; Nagel 1964: Taf. 3). Vertical ribs on the shoulder are also present on an (unpainted?) vessel from Tomb B with gabled roof at Tepe Jarali (Pl. 17:2) (Tarhan, southern Pish-i Kuh; the tomb structure is identical to the Dar Tanha, Badr graves). This kind of decoration is also present at Kunji Cave (Pl. 18). A painted vessel from Tall-i Malyan TUV shows equally some vertical ribs (Nicholas 1990: pl. 14b). This vertical rib decoration seems to have been rather long living.

The "Mussian style" probably belongs to Early Dynastic I & II, in terms of Mesopotamian chronology. Although difficult to date this style precisely, it has most likely been produced during the first half of the 3<sup>rd</sup> mill. B.C.

*"Arc and ray", "rising sun" or "Aliabad"-style (only Deh Luran Region) (Pl. 10)*

Besides the jars mentioned above, a second regional style of painted vessels in the Deh Luran shows the "rising sun" motif or "arc and ray". Vessels (Pl. 10:5-7) of this style were found in the same rectangular mud-brick tombs at Aliabad as the "Mussian" style (Gautier & Lampre 1905: 137 fig. 266; 139, fig. 283-284; 141, fig. 285; Nagel 1964: Taf. 27; Carter 1987: 76, fig. 1b; some have a winged lug on the shoulder which is in general attributed to Early Dynastic I) and in the settlement of Farukhabad (Pl. 10:1-4), on the Maimeh/Mehmeh river (Wright 1981: 116, 124-125, fig. 62H: in levels A13: fig. 59d, B20: fig. 59e; B21: fig. 59g; B24: fig. 59i, B25: fig. 59h and B26: fig. 59f) in levels attributed mainly to Djemdet Nasr and Early Dynastic I (Wright 1987: 150 note 7; Carter 1987: 75; Haerinck 1987: 64; Neely & Wright 1994: 5, 28, 30; Voigt & Dyson 1992: 128).

A few vessels of this style were also excavated at Susa (Pl. 11:1) (de Mecquenem 1934: 190, fig. 22; Le Breton 1957: 114-115, Pl. XXVI n° 9: attributed to Susa Db; Carter 1987: 77, fig. 2 a & b).

A vessel with a quite similar decoration was found in an Early Dynastic I context at Ahmad al-Hattu (Pl. 11:2), in Hamrin, ca. 330 km to the NW of Deh Luran (Eickhoff 1993: Abb. 43 n° 93). A more or less related decoration is to be seen on a jar from Level VII at Tell Gubba, also in Hamrin (Fujii 1981: 34, fig. 12 n° 2).



It is interesting to observe that no such vessels were found in a Luristan context. This could indicate that this style was not distributed further to the North of Deh Luran. Another plausible explanation would be that the tombs excavated in the Abdanan-area are later than Early Dynastic I.

The "Aliabad style" is probably mainly to be dated in the Djemdet Nasr and Early Dynastic I period.

*Region of Badr (Pl. 14 top row; Pl. 15)*

It could be suggested that by the end of the 4<sup>th</sup> millennium BC, after the collapse of the Uruk-system, certain population groups that previously had left the mountainous regions for the more attractive lowland sites moved back into these deserted and less favoured regions. In Pusht-i Kuh the graveyard of **Mir Khair**, in the western part of Badr region (zone 3) is the oldest site of the "early Early Bronze Age I" (=EBA I). The three small tombs at Andjireh, south of Gulgul (zone I), are likely to belong to the same horizon (Haerinck & Overlaet 2010a: Pl. 48-49, Pl. 28).

Although originally attributed to the Akkadian period (Vanden Berghe 1979: 31), it is clear now that Mir Khair should be dated to the Djemdet Nasr period in terms of S-Mesopotamian chronology (Haerinck 1987: 56-59; Wright 1987: 150 note 7; Haerinck & Overlaet 2002: 170; 2004b: 124). The site was never reused at a later period. Mir Khair most likely predates Kalleh Nisar AI, in western Pusht-i Kuh (zone 1). At Kalleh Nisar, however, some vessels were excavated that closely resemble in shape those from Mir Khair. We suggest a date of 3100-3000 BC for Mir Khair, while for Kalleh Nisar a start at about 3000 BC is suggested. We attribute both to the "Early Bronze Age I" in Pusht-i Kuh, with Mir Khair for the earlier part and Kalleh Nisar AI for the later part of it.

Sixty-four stone cists were excavated at Mir Khair (Vanden Berghe 1979). They are mostly individual tombs. Twenty had a gabled roof, the remainder a flat one. Most tombs are between 1.60 m to 2.40 m in length (on the exterior). The largest measured 4.20 m but was originally a smaller tomb, which was extended later. The majority of the burial goods consisted of pottery, but included a few metal objects as well (only 9 items: blades, a flat axe and coiled bracelets and finger rings made of copper wire). Besides some monochrome ware (Pl. 14: bottom rows), there were also bichrome/polychrome vessels (Pl. 14: top row). The few bichrome/polychrome vessels are most likely wheel made and of a light yellowish brown



fabric. These vessels have a brownish black and brownish red paint applied on an unslipped surface. The painting is faded since it was applied after firing. The assemblage consists of rather squat jars with a slightly carinated or rounded profile and low, broad neck and everted rim. Painting is attested on the upper half of the vessels but painted (sometimes wavy) bands are to be seen below the carination. The geometric decoration, consisting of repeated crosshatched triangles is confined to the shoulder. These triangles are bordered by black lines filled in with red, and are sometimes separated by vertical lines equally filled in with reddish paint. The lower third of the vessel remains undecorated. In general the shape and decorations fits in into the late 4<sup>th</sup>/early 3<sup>rd</sup> millennium BC (Iran-Farukhabad: Wright 1981: pl. 58g (B28); Neely & Wright 1994: 29, fig. III9b; — Susa: de Mecquenem 1912: Pl. XIV n° 1, pl. XVII n° 6; de Mecquenem 1943: fig. 72 n° 2-3; Le Breton 1957: Pl. XXVI, 7; Mesopotamia — Diyala: Delougaz 1952: pl. 8, bottom, pl. 9, 11, 12, 15, 52c,...136; — Ahmad al-Hattu: Eickhoff 1993: Abb. 36; Abb. 46: 125-128; — Gubba: Fujii 1981: fig. 11 n° 4 & 7, fig. 14 n° 3-7, fig. 15 n° 1-2, 4, fig. 17 n° 1-3, 6; — Kheit Qasim: Forest 1980: 218, fig. 5).

At the site of **Dar Tanha**, in the vicinity of the Garab river, two large tombs with rather shallow burial chamber and gabled roof were discovered (interior measurements: approx. 6 m long, 1.30 m wide), as well at **Ban Chaliah**. These tombs have a particularity: below the pitched roof one slab is placed horizontally on the sidewalls on one side of the grave. The same type of structure, with gabled roof and one horizontal slab on one side, is to be found in graves at **Tepe Jarali** (Pl. 17), in Tarhan and in Kishmahar valleys (Thrane 1965: 165-166, fig. 12; Thrane 1968: 25, fig. 22; Thrane 1970: 34, ill.). The Jarali tomb is maybe to be dated around 3000/2900-2800 BC (see also further Kunji Cave for comparisons).

One grave at Dar Tanha contained a large variety of copper/bronze objects, but also a lot of painted pottery. Most of that pottery is monochrome painted and will be looked at further on. It contained also one polychrome vessel and some sherds (Pl. 15). Paint is red and black on a slipped surface. The complete vessel (Pl. 15:1) has a small knoblike handle on the transition from shoulder to the body and a purely geometrical painted decoration on the shoulder. Fragments of another vessel show wavy lines. These vessels represent most likely contacts with region I, to the West, where "scarlet" ware is present. It is thus not excluded that part of the Dar Tanha (Badr region) burial goods could date to the Early Dynastic I/II in terms of

Mesopotamian chronology. This chronological indicator could be important as well for dating the monochrome ware in the case that both kinds of pottery, the monochrome and the polychrome, were in use simultaneously. This monochrome ware could thus represent a phase of its own, preceding the fully developed Godin III:6 style. It could be an additional proof as well to suggest that this monochrome ware was a Luristan creation that was only later on introduced at Susa and Godin.

For other regions, like Hulailan, Tarhan etc... we have no information on the occurrence of polychrome wares of Early Bronze Age date.

*Khorramabad Region (Pl. 18-20)*

Further to the North, at **Kunji Cave**, in the vicinity of Khorramabad, two burials constructed of stones were discovered. One tomb was ca. 4 m long and 0.50 m wide. It is a collective burial with 16 individuals (mni). Another burial contained remains of 7 individuals. At least 62 pottery vessels were found as well as a few metal objects. This assemblage was first dated by Speth (1971: 173) to the Djemdet Nasr and Early Dynastic, but in a later publication an Early Dynastic II, ca. 2700-2600 BC was suggested (Emberling e.a. 2002: 49, 54).

However, we feel the burials are more at home in very late 4<sup>th</sup>/early 3<sup>rd</sup> millennium BC. We believe that the dating of different pottery vessels and some other objects from Kunji Cave would allow for a date between ca. 3100/3000-2900/2800 BC., i.e. proto-Elamite (Susa III A/B / Middle Banesh) or Djemdet Nasr / Early Dynastic I in terms of Mesopotamian chronology.

Numerous vessels show vertical ribs on the shoulder (Emberling e.a., 2002: 84, fig. 10a; 92, fig. 20; 97, fig. 25; 102, fig. 30a). In the preliminary report (Speth 1971: 173) it was noted that: "*Several vessels with inverted "nose" lugs, panelled fugitive bichrome painting, punctuate designs near the neck, ledge rims, wide shoulders and ring bases suggest a Jemdet Nasr affinity. Other vessel forms, especially red slipped "fruit stands" suggest an Early Dynastic affinity*". However, in 2002 (Emberling, Robb, Speth & Wright 2002: 49, 53-54) an Early Dynastic II date, ca. 2700-2600, was advocated, particularly in view of the presence of so called "fruit stands". We would like to point out that these fruit stands (Pl. 19:2) need not necessarily to be influenced by Mesopotamia but could as well be a local shape, developed independently from Mesopotamian



examples. We should not forget that further on the Iranian Plateau, at Hissar II, of the same time range as Kunji Cave (Voigt & Dyson 1992: 170-171) there are numerous vessels of plates, dishes and bowls on a high pedestal base (Schmidt 1937: Pl. XXIII, XXV). One could eventually suggest that the type was transmitted from western Iran into Mesopotamia.

At Kunji so called fruit stands (Pl. 19:2) (Emberling e.a. 2002: 84, fig. 10e; 88, fig. 15f & g; 94, fig. 22a & b; 99, fig. 27d) were found together with (unpainted or painted) vessels with inverted nose lugs, and mostly with a rope ridge around the shoulder (Pl. 19:6; Pl. 20:8-10) (Emberling e.a. 2002: 82, fig. 8b; 84, fig. 10a, b, d; 87, fig. 14a; 93, fig. 21b; 99 fig. 27a).

The vessel type with or without nose lugs and with or without rope ridge, exists already in late Uruk (e.g. at Susa: Le Brun 1971: fig. 51, fig. 53 n° 4; Godin Tepe V: Levine & Young 1987: 41, fig. 21: some with incised decoration and some rare examples with simple painting; Badler 2002: 84-86). Painted vessels of this type are attested mainly in Djemdet Nasr/Protoliterate d contexts in Mesopotamia (at Gubba: Fujii 1981: 33, fig. 11 n° 33: level VII; fig. 37 n° 15: level V, both without ridge; at Ahmad al-Hattu: Eickhoff 1993: Abb. 36 n° 20: without ridge; Uqair: Lloyd & Safar 1943: Pl. XXIII, without ridge; Pl. XXIV: with ridge; Pl. XXVII; Djemdet Nasr: Matthews 2002: fig. 19). In Iran these painted vessels are found in proto-Elamite levels on many sites such as Susa (Le Brun 1971: fig. 53 n° 4: Acropole Level 17; fig. 64 n° 8: Level 15B; Amiet 1986: ill. 43 n° 7); at Tall-i Ghazir in Ram Hormuz (Caldwell 1968: 353, fig. 31; 354, fig. 39); at Tepe Jarali (Pl. 17:1), in Tarhan Pish-i Kuh, though more rounded, can be reckoned to the same type (Thrane 1965: 167, fig. 13 right) (cfr. Mir Vali Tomb 3: MV 51); at Tepe Siyalk (Nokhandeh 2004: 49, in Persian, fig. 2 n° 4); at Arisman (Helwing 2005: 432, fig. 8), at Ozbaki (Madjidzadeh sd.: 102, n°12); at Tall-i Malyan (Nicholas 1990: e.g. pl. 17f); and at Tepe Yahya (Amiet 1986: Ill. 56a; Potts 2001: 11-12, 41-43, 93; Lamberg-Karlovsky 2001: 270).

At Kunji Cave also tomb G/B2 contained a fragment of a solid foot goblet or the proto-Elamite "gobelet à base en moignon" with a string cut base (Emberling ea. 2002: 94, fig. 22c). Similar or related vessels are present in proto-Elamite levels at Susa (Le Brun 1971: fig. 60 n° 1-4: Acropole level 16/15B; Amiet 1986: 96), at Farukhabad (Wright 1981: Djemdet Nasr period, fig. 45e: level A16, 45f: level A19 and 45g: level B26) and at Tall-i Malyan (Nicholas 1990: pl. 13 w-bb,



Middle Banesh). We should also point to the presence of a fragment of a bevelled rim bowl at Kunji (Emberling *ea.* 2002: 102, fig. 30e), which makes a pre-Early Dynastic II dating even more plausible (Carter 1980: fig. 14 n° 1-3: Ville Royale 18/17; only scattered strays are known from later levels).

Also the painted jars (bichrome black and red paint on a white slip, with banded decoration and some with panel decoration) (Pl. 19:1,3-5) (Emberling 2002: fig. 8a, fig. 11; fig. 14 b-d, f; fig. 21c; fig. 26a-f; fig. 30b) are more at home in a late 4<sup>th</sup>/early 3<sup>rd</sup> mill. context (eg. Susa: Le Brun 1971: 186, 194-195, 200, fig. 53 n° 4: niv. 17; fig. 63 n° 1, fig. 64: niv. 16-14B; Arisman: Stöllner, Slotta & Vatandoust 2004: 654, Helwing 2005: 432, fig. 8; Tall-i Malyan: Nicholas 1990: pl. 19c, g, t; pl. 20d; pl. 21b). The decoration was painted only in geometric patterns.

For Kunji we can also mention a lead vessel (Speth 1971: 173; Emberling *ea.* 2002: 52, 95 fig. 23a: burial G/B2). Lead is a particularly common product in Early Dynastic I times in Mesopotamia (Moorey 1994: 294). It is present in the so called Djemdet Nasr cemetery at Ur and the oldest burials at Khafadjeh (Houses 12 - earlier) of basically Early Dynastic I date (Porada *e.a.* 1992: 104) or at Ahmad al-Hattu (Eickhoff 1993: 176). Lead vessels were also found on Iranian sites in proto-Elamite levels (eg. Susa & Tall-i Malyan: Amiet 1986: 96, 108; Tallon 1987: 223-224, 318-319).

Finally we should mention a silver (Speth 1971: 173) or copper alloy (?) pendant in tomb G/B2 at Kunji (Emberling *ea.* 2002: fig. 22e) which can readily be paralleled at Susa (de Mecquenem 1934: 15, Ill. 12; Le Breton 1957: 109, fig. 27 n° 6; Amiet 1966: Ill. 46; Tallon 1987: vol. 1: 113, Pl. 314 n° 1159, vol. 2: 263, 315, 319; Stöllner, Slotta & Vatandoust 2004: 656, n° 245); at Tepe Siyalk (Ghirshman 1939: 69-70, 125 sq., Pl. XXX n° 1; Amiet 1986: 69; Stöllner, Slotta & Vatandoust 2004: 619 n° 134) and at Arisman (Stöllner, Slotta & Vatandoust 2004: 656 n° 244) in late 4<sup>th</sup>/early 3<sup>rd</sup> millennium contexts.

On the whole, the material from Kunji Cave fits in very well in late 4<sup>th</sup>/early 3<sup>rd</sup> millennium. It is probably best be dated somewhere between Late Uruk, in the Djemdet Nasr period or at the latest in Early Dynastic I times in terms of S-Mesopotamian chronology or the early Proto-Elamite period (Susa IIIA&B/Middle and Late Banesh periods).

Bichrome/polychrome pottery is also reported from Gilviran at Khorramabad (Herzfeld 1929/30: 70; Haerinck & Overlaet 2012).

## Monochrome painted pottery

### *Western Pusht-i Kuh (Pl. 11:1-2)*

In the western part of Pusht-i Kuh a rather large jar with monochrome decoration in reddish brown was found at **Kalleh Nisar AI** (Pl. 11: 1) (tomb 12 n° 1; Haerinck & Overlaet 2008: 26, fig. 11) and at Bani Sol (tomb 2 n° 7). Both are decorated with vertical lines below the shoulder. The vessel from **Bani Sol** (Pl. 11:2) has a little lug on the shoulder. This lug reminds us of Early Dynastic examples (Pl. 2:9-10, see also Dar Tanha: Pl. 15:1).

Monochrome pottery is also present in the Diyala (Delougaz 1952: 44, 72) and Hamrin (Eickhoff 1993: 102) in the Protoliterate period and in Early Dynastic I and II. The decoration of the rare Pusht-i Kuh vessels is comparable to some from Hamrin (Eickhoff 1993: Abb. 41 n° 76, Abb. 42 n° 90-91, Abb. 43 n° 93, Abb. 47 n° 144-145).

Two sherds from Bani Surmah (Haerinck & Overlaet 2006: 26, fig. 10) are maybe of mid 3<sup>rd</sup> millennium BC date.

### *Region of Deh Luran-Abdanan-Rumishgan (Pl. 12-13)*

Both in the Abdanan and Rumishgan sites there is also a vast amount of wheel made pottery with monochrome painting. A typical vessel shape is the wide, deep bowl with a carinated profile and an everted rim (Pl. 12:3-5). These bowls are decorated with neatly painted triangles or oblique lines painted orange red, brownish red to dark brown or almost black. These vessels can be compared to Susa (Ville Royale I: Carter 1980: 61, fig. 15: 12-13 = level 14; 85: fig. 28: 2-4 = levels 12, 9A & 10) and Godin Tepe III:6 (Henrickson 1987: 86: fig. 4 n° 6, 8, 9, 15-17 ...).

Another shape present at Abdanan and Rumishgan is the deep bowl with slightly concave wall (Pl. 12:6) (only at Tawarsa) and Mir Vali Tombs II and IV (Pl. 13:1-3) (Schmidt, van Loon & Curvers 1989: Pl. 79, e, g, h and Pl. 81 c, d). A similar vessel shape was also found at Godin Tepe III:6 (Pl. 21:1) (Henrickson 1987: 89, fig. 7 n° 4, 14).

At Mir Vali Tomb II included, besides the two types mentioned above also jars with a carinated profile and low, narrow neck (Pl. 13:7) and a jar with round profile and a spout (Pl. 13:8). This jar with spout is comparable to a vessel from Susa (Pottier 1912, Pl. XXV, 7) and one from Gilviran, near Khorramabad (Herzfeld 1929/30: 70).



*Region of Badr and further Northeast (Khorramabad...) (Pl. 14 bottom no 1-7; Pl. 16-22)*

The earliest monochrome ware excavated in Pusht-i Kuh, most likely belongs to **Mir Khair**, to be dated in the Djemdet Nasr period.

Besides a few polychrome vessels there were in the small tombs at Mir Khair small jars with broad neck and with a rounded or carinated body (Pl. 14: bottom n° 1-7) (compare e.g. to Ahmad al-Hattu: Eickhoff 1993: Abb. 36 & 39). Decoration is limited to horizontal bands with some slanting vertical lines or simple triangles on the shoulder and wavy lines below the carination or a horizontal band. The brownish painting was applied after firing and is mostly very faded. It is difficult to see the complete decoration. The paste is yellowish to light brown.

From the burials at **Kunji Cave** at Khorramabad comes a different pottery, of proto-Elamite style with horizontal painted bands (Emberling e.a. 2002: e.g. fig. 11; fig. 14b-f; fig. 26), datable to late 4<sup>th</sup>/early 3<sup>rd</sup> millennium. This pottery most likely belongs to people who travelled up and down the Kharkeh, eventually to proto-Elamite stations further North.

At **Dar Tanha** (Badr region) tomb I contained 14 monochrome painted vessels and only one complete polychrome and some fragments of two other polychrome vessels (Pl. 16). The monochrome vessels are decorated on the upper part of the vessel only and painted in red, reddish brown to dark brown. Vessel shapes tend to be similar as most polychrome vessels of scarlet ware type from western Pusht-i Kuh (zone I). It are all jars with a rounded or slightly carinated shoulder and with flat, rounded or low ring base. Monochrome vessels like the carinated bowls from the Deh Luran-Abdanan-Rumishgan region (e.g. Pl. 12: 3-5 & Pl. 13: 5-6) are absent at Dar Tanha. A deep bowl with slightly concave walls (of type Pl. 13:1-3; Pl. 21:1) was found in Dar Tanha Tomb 2.

Although the vessel shapes at Dar Tanha are in some way related to scarlet ware, the decoration is not. The decoration is only geometrical. It shows groups of narrow slanting lines forming triangles or solid triangles bordered by end-to-end triangles with a wavy line on each side, and single or double shark's teeth. There are also a "series of three arcs in the main register which form a triangle when seen from above" (Pl. 16:5 & Pl. 22:1-2) (typical for Godin III:6: Henrickson 1987a: 45; also present on a spouted vessel from Gilviran, Khorramabad: Herzfeld 1929/30: 70; Haerinck & Overlaet 2012). Most motifs are related to the pottery from Godin III:6. The vessel shapes

though are not fully the same. It could well be that Dar Tanha can be considered as the precursor of the more developed Godin III:6 style. At Godin Tepe this style replaces the Early Transcaucasian pottery and might thus indicate a movement of people from southern Luristan further northwards (see further). This remains to be proven. The lack of evidence in this vast Luristan region excludes any serious analyses for the moment.

Crucial in the dating of the monochrome ware of Abdanan/Rumishgan and Dar Tanha is the chronology of Godin Tepe Deep Sounding and Susa.

At **Godin Tepe** (Pl. 21-22), period III follows on the Early Transcaucasian Godin level IV. Early Transcaucasian is already present there from the late Uruk period onwards (late levels of period V) (Badler 2002: 79, 83, 88 note 3, 89 note 26). In Godin III:6 there is a certain degree of continuity of Godin IV vessel-types, as a minor household-made component and continuity of settlement (Henrickson 1987: 44; 1989: 81-82). R. Henrickson (1986: 22; 1987b: 207; 1989: 131-136) sees this phenomenon of continuation as the result of local assimilation of an earlier tradition into the local Godin III:6 assemblage and of the melding of this area and its people with the economic network to the southwest. However, R. Henrickson mentions also there was a hiatus of uncertain duration in occupation between level IV and III:6, at least within the area of the Deep Sounding (Henrickson 1989: 89). He considers equally the polychrome and perhaps the early monochrome wares in the piedmont to be contemporary with the later Godin IV occupation in the eastern valleys. The monochrome painted buff ware assemblage replaces the Godin IV assemblage in Kangavar, where it is designated Period III.

The length of occupation of the Early Transcaucasian Godin IV-phase is important for evaluating the starting date of the Godin III-sequence at Godin Tepe. Unfortunately the excavators of Godin Tepe do not provide estimations for the duration of phase IV occupation. Two sealings from Godin Tepe (Young & Levine 1974: 111, fig. 34 n° 3) are paralleled in the late Protoliterate or Early Dynastic I period in Mesopotamia (Voigt & Dyson 1992: 162). Some Early Transcaucasian pottery was also found further South (at Susa, in unstratified contexts: Voigt & Dyson 1992: 162; one sherd was found in Banesh levels at Tall-i Malyan TUV: Nicholas 1990: Pl. 23d in tertiary context). Wright and Rupley (2001: 94-96, fig. 3, 7 Tab. 3.1) suggest the beginning of Godin IV after 3050 B.C.

Godin level III:6 is with five (Henrickson 1987a: 36, 42) or six (Henrickson 1989: 86) architectural levels the longest continuous occupation. As to the



dating, Robert Henrickson (1987a: 48) suggests: "*In conclusion, Godin III:6 may be considered contemporary with ED IIIB (2500-2400B.C.), although both the initial and terminal dates remain uncertain. Godin III:6 probably extends back through ED IIIA (2600-2500B.C.), perhaps to ED II, particularly in western valleys. The terminal date must be based, in part, on that of Godin III:5, but it is unlikely to last much beyond the end of ED IIIB*", and further (Henrickson 1987a: 49): "*The ambiguous evidence suggests that Godin III:6 ended no later than during ED IIIB. We may infer that Godin III:5 ought to be contemporary with the Proto-Imperial (2400-2350 B.C.) and Akkadian (2350-2200 B.C.) periods in the lowlands, perhaps beginning as early as ED IIIB. The clear stylistic continuity from Godin III:6 to Godin III:5 suggests a relatively unbroken development from one phase to the next, although both may readily be distinguished*". In 1987b: 208 he repeated that "*Godin III:6 therefore dates to Early Dynastic III-times, perhaps as early as Early Dynastic II*".

Painted buff pottery from western Iran was found in Early Dynastic IIIB levels at al-Hibba, ancient Lagash (Crawford 1972; Hansen 1973; Hansen 1978: 72-85). Sherds were found in levels with tablets and sealings bearing the names of Enannatum I, Eannatum and Lumatur, son of Eannatum. These sherds are often advanced to procure a secure dating for the Godin assemblage. Henrickson (1987a: 45-46) tends for a comparison with Godin III:6; E. Carter & D. Hansen on the other hand (Henrickson 1987a: 45 note 14), and we as well, lean towards an Godin III:5 date for the al-Hibba sherds. However, R. Henrickson (1987a: 46) goes on to suggest that the sherds from al-Hibba could represent a transitional phase between III:6 and III:5, and to be dated to Early Dynastic IIIB. Level III:5 could than be attributed to proto-imperial and Akkadian periods (Henrickson 1987a: 51). If these dates are correct, a late Early Dynastic IIIA, or eventually an early Early Dynastic IIIB date for the last phases of III:6 would be acceptable.

Since Phase III:6 (of which the earliest levels were not reached by excavations) is long living and seemingly represents an uninterrupted sequence of five to six building levels, whereas all other levels are only attested by one or two layers, an initial date for this phase well into Early Dynastic II seems very plausible and realistic to us. Indeed, phase III:6 must have lasted for several generations. R. Henrickson suggests a 30 to 50 year period as average lifetime of domestic mud brick structures (Henrickson 1987a: 36). He attributes 200 to 250 years (Henrickson 1985: 570; 1987a: 114), and even 300 years (Henrickson 1984: 101, 103) to this phase. In his

chronological chart (Henrickson 1987a: 114) he proposes to date Godin III:6, between 2650/2600-2450/2350 BC. As to the final date we have to remind that R. Henrickson has stipulated already that Godin III:6 is unlikely to last much beyond the end of Early Dynastic IIIA (Henrickson 1987a: 49).

However, the initial date for the start of Godin III:6 might thus eventually be put earlier than 2650/2600 B.C. If the sherds from al-Hibba are indeed III:5, this would imply that the beginning date at Godin for the monochrome painted buff ware (Godin III:6) could be substantially pushed up higher. Remains to be seen when Godin IV ended.

After the burnished grey-black ware of Early Transcaucasian types (Godin IV), the monochrome painted wares of Godin III:6 suddenly appear, in fully developed form. Most scholars now do agree that the origin of the monochrome ware at Godin (and at Susa as well), are to be sought somewhere in Luristan (Carter 1980: 26; Henrickson 1986: 21; 1987a: 42). Actually, to this point we could add that monochrome wares were ever present also in Mesopotamia during Djemdet Nasr/Early Dynastic I/II, in limited numbers though, in the Diyala (Delougaz 1952: 44, 72) and in Hamrin (Eickhoff 1993: 102). On the Iranian Plateau Siyalk III/IV & Hissar monochrome types continue to be produced until late 4<sup>th</sup>/early 3<sup>rd</sup> mill.

It might also be interesting to point out that a few vessels from Godin III:6 (Pl. 22: 3) show animals with elongated bodies on the upper part of the vessels. Birds sit on their back or are placed in the field. This type of representation is most likely a monochrome imitation of Early Dynastic I & II polychrome vessels, and likely more particularly of the polychrome Deh Luran-Abdanan-Rumishgan vessels further south (compare Pl. 6, 7-1, 8-1 & 9-1 with Pl. 22: 3).

In Mahi Dasht, Godin III:6 seems to have been partially contemporary with Maran Red Slipped Ware (Levine & Young 1987: 48, 50). At **Chogha Maran**, 20 km to the NW of Kermanshah, a collection of almost 200 jar sealings was found in the Maran Red Slip level. L. Levine & C. Young (1987: 48) mention on these seals: "*The latter, on preliminary analysis, can be dated to the Late Early Dynastic times, perhaps as Early II*", and further: "*It may well be, however, that the foundation of level III:6 at Godin dates to before this and that the phase begins in the highlands as early as ED II time - a suggestion perhaps supported by the association at Chogha Maran of Godin III:6 with the sealings which*



*may well date as early as ED II times*". Unfortunately this collection of seals awaits publication.

The evidence from excavations at **Susa** is of not much use for precision dating. Numerous Bronze Age levels and tombs were excavated, mainly by R. de Mecquenem (1934), but all are very badly excavated and published. Excavations in the '60's by M.-J. Steve and H. Gasche (1971) in Bronze Age levels received also some criticisms (van Loon 1981: 712-714; Dittmann 1986 & 1987; Haerinck 1987: 64). Equally E. Carter's published results (1981) leave room for other interpretations (Meyer 1983-84 but Dittmann 1987: 33, 45; Haerinck 1987: 64-65). Although these were well controlled and recorded excavations the area that Carter dug was very small and consisted only of a couple of square meters.

Based on all published results Reinhard Dittmann (1986; 1987) attempted to elaborate a chronology for the first half of the 3<sup>rd</sup> millennium. How commendable his well documented attempt may be, his elaborate and complex construction of critical approach of previous authors remains stuck in vague, sometimes contradictory archaeological evidence provided in the past. He also puts a heavy emphasis on stylistic and glyptic comparisons and relies heavily on Mesopotamian stratigraphy, which is equally not always of the best quality and not accepted necessarily by everyone.

How it may be, Ville Royale I, levels 15-13 are considered by E. Carter as equivalent to Early Dynastic II, contrary to Meyer (1983/84) who proposes an Early Dynastic I date. Carter puts her level 12 into ED IIIA. R. Dittmann 1986: 191 came to the conclusion that the material from "Couche-4b" of the Terrace excavation and Ville Royale I, 12-11 and 15-13 roughly cover the Early Dynastic IIIA and II period in Babylonia.

However, between level 13 and 12 there was an erosion level, which could point to a substantial gap. Carter clearly states that monochrome ware is already present in level 13 (Carter 1981: 21), be it only simple geometric designs and not the elaborate ones, that only appear from level 12 onwards. Henrickson (1987b: 208) observed also that "*In Carter's sounding in the Ville Royale it is noteworthy that while the strata characterized by Susa IVA (Susa Dc) monochrome painted pottery (strata 9-12) provide numerous parallels to Godin III:6, the preceding strata (13-15) which are characterized by the use of a red wash on bowl and jar rims also provide good parallels to Godin III:6*".

Steve and Gasche (1971: 107) put the introduction for the monochrome Susa II-style in their level 4a, but it should be noted that the presence of

this ware was already attested in level 4b (see Dittmann 1987: 32 note 9). They date their level 4 to Early Dynastic III and level 3 to Proto-imperial (Steve & Gasche 1971: 61, 91-92, note 68). This dating is contested by van Loon, who, following Le Breton and Dyson prefers an Early Dynastic I-II date for level 4, and an Early Dynastic III date for level 3 (van Loon 1981: 711-712). R. Dittmann (1987: 33 note 18; 45-48) does not agree with this dating.

It follows thus that the introduction of the Susa II-style is not clear, particularly since there is no agreement on the dating of the different levels and conflicting opinions quickly mean a hundred years earlier or later.

On the other hand since the monochrome style has most probably been introduced from elsewhere (most likely Luristan), it may have taken some time to get introduced in other regions. A similar pattern can be observed at Godin, where the Godin III:6-style suddenly appears fully developed (Henrickson 1986: 21), though the earliest levels were not reached during excavation.

## Conclusion

Translating the fairly high degree of ceramic diversity in Luristan into an ethnic or political conclusion is very dangerous, and I think it is simply impossible with the actual very limited evidence at hand.

For the late 4<sup>th</sup>/first centuries of the 3<sup>rd</sup> millennium there are no written sources that could help us to do so. Whether the fragmentation in different pottery groups and affiliations have a cultural meaning and reflect individual tribes/groups/political entities can't be confirmed nor denied. More recent migration routes of nomads are largely consistent with the regional division in ancient Luristan. Of course these routes are also largely dictated by the geographical characteristics and constraints of the region.

How and where Luristan was in relation to the proto-Elamite or Mesopotamian worlds remain to be seen. Even establishing a clear chronology is for the moment almost impossible and an hazardous exercise. Suggesting that they all were transhumant pastoral nomads might not be fully correct and there might have been a mix of populations with nomadic and settled groups, particularly in Pish-i Kuh and in NW-parts of Pusht-i Kuh (Shirvan-Chardaval). In the latter regions ancient mounds are evidenced, but this is not the case for large parts of Pusht-i Kuh.



Several scholars have attempted to identify the Western Zagros region of Luristan with an historical entity during the 3<sup>rd</sup> millennium BC, although for the first half of that millennium there is no evidence at all. For the second half it has been suggested to identify the region N of Susiana with Shimaski, Awan or with the homeland of the Guti (for a survey see T. Potts 1994: 30-34; D.T. Potts 1999: 87-93, 97-98, 127, 139-149; Haerinck & Overlaet 2006: 70; Steinkeller 2007). However, each attempt to make an identification has for the moment to remain stuck in absence of written sources.

One fact is clear however, at least in the ceramics: we have to deal with several regions with a different pottery tradition. This mosaic is so far best evidenced in Pusht-i Kuh. Pish-i Kuh remains unfortunately largely not documented. Whether the different groups within Luristan formed a single, united political entity directed by a single authority or was a mosaic of separate, different entities is largely an issue that has to remain in the realm of speculation.

## Bibliography

- ABDI, K., NOKANDEH, G., AZADI, A., BIGLARI, F., HEYDARI, S., FARMANI, D., REZAI, A. & MASHKOUR, M., 2002. Tuwah Khoshkeh: A Middle Chalcolithic Mobile Pastoralist Camp-site in the Islamabad Plain, West Central Zagros Mountains, *Iran* XL: 43-74.
- ABDI, K., BIGLARI, F. & HEYDARI, S., 2003. Islamabad Project 2001. Test Excavations at Wezmeh Cave, *Archäologische Mitteilungen aus Iran und Turan* 34: 171-194.
- AMIET, P., 1966. *Elam*, Paris.
- , 1986. *L'âge des échanges inter-iraniens 3500-1700 avant J.-C.*, (= Notes et Documents des Musées de France 11), Paris.
- BADLER, V.R., 2002. A Chronology of Uruk Artifacts from Godin Tepe in Central Western Iran and Implications for the Interrelationships between the Local and Foreign Cultures, in: Postgate J.N. (ed.), *Artifacts of Complexity. Tracking the Uruk in the Near East* (= Iraq Archaeological Reports 5), Cambridge: 79-109.
- CALDWELL, J.R., 1968. Ghazir, Tell-i, *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*: 348-355.
- CARTER, E., 1980. Excavations in Ville Royale I at Susa: The Third Millennium B.C. occupation, *Cahiers de la Délégation Archéologique Française en Iran* 11: 11-134.
- , 1987. The Piedmont and the Pusht-i Kuh in the early third millennium B.C., in: Huot J.-L. (ed.), *Préhistoire de la Mésopotamie*, Paris: 74-83.

- CRAWFORD, V.E., 1972. Excavations in the Swamps of Sumer, *Expedition* 14 n° 2: 12-20.
- DELOUGAZ, P., 1952. *Pottery from the Diyala Region* (= Oriental Institute Publications 63), Chicago.
- DITTMANN, R., 1986. Susa in the Proto-Elamite Period and Annotations on the Painted Pottery of Proto-Elamite Khuzestan, in: Finkbeiner U. & Röllig J. (eds.), *Ĝemdet Našr. Period or Regional Style?*, Wiesbaden: 171-196.
- , 1987 (1989). Bemerkungen zum Protoelamischen Horizont, *Archäologische Mitteilungen aus Iran* 20: 31-63.
- EICKHOFF, T., 1993. *Grab und Beigabe. Bestattungssitten der Necropole von Tall Ahmad al-Hattu und andere frühdynastischer Begräbnisstätten im südlichen Mesopotamien und in Luristan* (= Münchener Universitätsschriften Philosophische Fakultät 12 – Münchener Vorderasiatische Studien XIV), München & Wien.
- EMBERLING, G., ROBB, J., SPETH, J.D. & WRIGHT, H.T., 2002. Kunji Cave: Early Bronze Age Burials in Luristan, *Iranica Antiqua* XXXVII: 47-104.
- FOREST, J.D., Kheit Qasim I, Un cimetière du troisième millénaire dans la vallée de Hamrin, Iraq, *Paléorient* 6: 213-220.
- FUJII, H., 1981. Preliminary Report on Excavations at Gubba, Sungur and Hamediat (Preliminary Report) (= Hamrin Report 6), *al-Rafidan* 2.
- GAUTIER, J.E. & LAMPRE, G., 1905. Fouilles de Moussian, *Mémoires de la Délégation en Perse* VIII, Paris: 59-148.
- GHIRSHMAN, R., 1939. *Fouilles de Sialk près de Kashan 1933, 1934, 1937, vol. II* (= Musée du Louvre, Département des Antiquités orientales. Série archéologique, tome V), Paris.
- GIBSON, McG., 1981. *Uch Tepe I. Tell Razuk, Tell Ahmed al-Mughir, Tell Ajamat. The Chicago-Copenhagen Expedition to Hamrin*, Chicago/Copenhagen.
- GOFF, C.L., 1971. Luristan before the Iron Age, *Iran* IX: 131-151.
- HAERINCK, E., 1987. The Chronology of Luristan, Pusht-i Kuh in the late fourth and first half of the third millennium B.C., in: Huot J.-L. (ed.), *Préhistoire de la Mésopotamie*, Paris: 55-72.
- HAERINCK, E. & OVERLAET, B., 1996. *The Chalcolithic Period, Parchinah and Hakalan* (= Luristan Excavation Documents I), Brussels.
- , 2002. The Chalcolithic and Early Bronze Age in Pusht-i Kuh, Luristan (West-Iran): Chronology and Mesopotamian Contacts, *Akkadica* 123: 163-181.
- , 2006. *Bani Surmah. An Early Bronze Age Graveyard in Pusht-i Kuh, Luristan* (= Luristan Excavation Documents VI), Acta Iranica 43, Leuven.
- , 2008. *The Kalleh Nisar Bronze Age Graveyard in Pusht-i Kuh, Luristan* (= Luristan Excavation Documents VII), Acta Iranica 46, Leuven.
- , 2010a. *Early Bronze Age sites to the west of the Kabir Kuh mountain (Pusht-i Kuh, Luristan)* (= Luristan Excavation Documents VIII), Acta Iranica 50, Leuven.
- , 2010b. Bronze and Iron Age pottery from the Ilam graveyard (Pusht-i Kuh, Iran), *Iranica Antiqua* XLV: 277-304.



- , 2012. The Bronze Age grave at Gilviran-Khorramabad (W-Iran), *Iranica Antiqua* XLVII.
- HAERINCK, E. & STEVENS, K.G., 1996. *Bibliographie analytique de l'archéologie de l'Iran Ancien. Supplément 3: 1986-1995*, Leuven.
- , 2005. *Bibliographie analytique de l'archéologie de l'Iran Ancien. Supplément 4: 1996-2003*, Leuven-Dudley, MA.
- HANSEN, D., 1973. Al-Hiba, 1970-71: A Preliminary Report, *Artibus Asiae* XXXV: 62-78.
- , 1978. Al-Hiba: A Summary of Four Seasons of Excavations 1968-1976, *Sumer* XXXIV: 72-85.
- HELWING, B., 2005. Early mining and metallurgy on the western Iranian Plateau: First results of the Iranian-German archaeological research at Arisman, 2000-2004, *Archäologische Mitteilungen aus Iran und Turan* 37: 423-434.
- HENRICKSON, E., 1994. The Outer Limits: Settlement and Economic Strategies in the Central Zagros Highlands during the Uruk Era, in: Stein G. & Rothman M.S. (eds.), *Chiefdoms and Early States in the Near East. The Organizational Dynamics of Complexity* (= Monographs in World Archaeology n° 18), Madison/Wisconsin: 85-102.
- HENRICKSON, R. 1984. *Godin Tepe, Godin III, and Central Western Iran, ca. 2600-1500 B.C.*, Ph.D. Dissertation, University of Toronto.
- , 1985. The Chronology of Central Western Iran 2600-1400 B.C., *American Journal of Archaeology* LXXXIX: 569-581.
- , 1986. A Regional Perspective on Godin III Cultural Development in Central Western Iran, *Iran* XXIV: 1-55.
- , 1987a. The Godin III Chronology for Central Western Iran 2600-1400 B.C., *Iranica Antiqua* XXVII: 33-116.
- , 1987b. Godin III and the Chronology of Central Western Iran circa 2600-1400 B.C., in: Hole F. (ed.), *The Archaeology of Western Iran*, Smithsonian Institution, Washington: 205-227.
- , 1989. The Buff and the Grey: Ceramic Assemblages and Cultural Process in the Third Millennium B.C. Central Zagros, Iran, in: McGovern P.E., Notis M.D. & Kingerey W.D. (eds.), *Cross-craft and Cross-cultural Interactions in Ceramics* vol. IV. American Ceramics Society, Westerville, OH: 82-148.
- HERZFELD, E., 1929/30. Bericht über archäologische Beobachtungen im Südlichen Kurdistan und in Luristan, *Archäologische Mitteilungen aus Iran* I: 65-75.
- LAMBERG-KARLOVSKY, C.C., 2001. Afterword. Excavations at Tepe Yahya: Reconstructing the Past, in: Potts D.T., *Excavations at Tepe Yahya, Iran 1967-1975. The Third Millennium* (American School of Prehistoric Research Bulletin 45. Peabody Museum of Archaeology and Ethnology Harvard University) (C.C. Lamberg-Karlovsky ed.), Cambridge: 269-280.
- LE BRETON, L., 1957. The Early Periods at Susa, Mesopotamian Relations, *Iraq* XIX: 79-124.
- LE BRUN, A., 1971. Recherches stratigraphiques à l'Acropole de Suse, 1969-1971, *Cahiers de la DAFI* 1: 163-216.

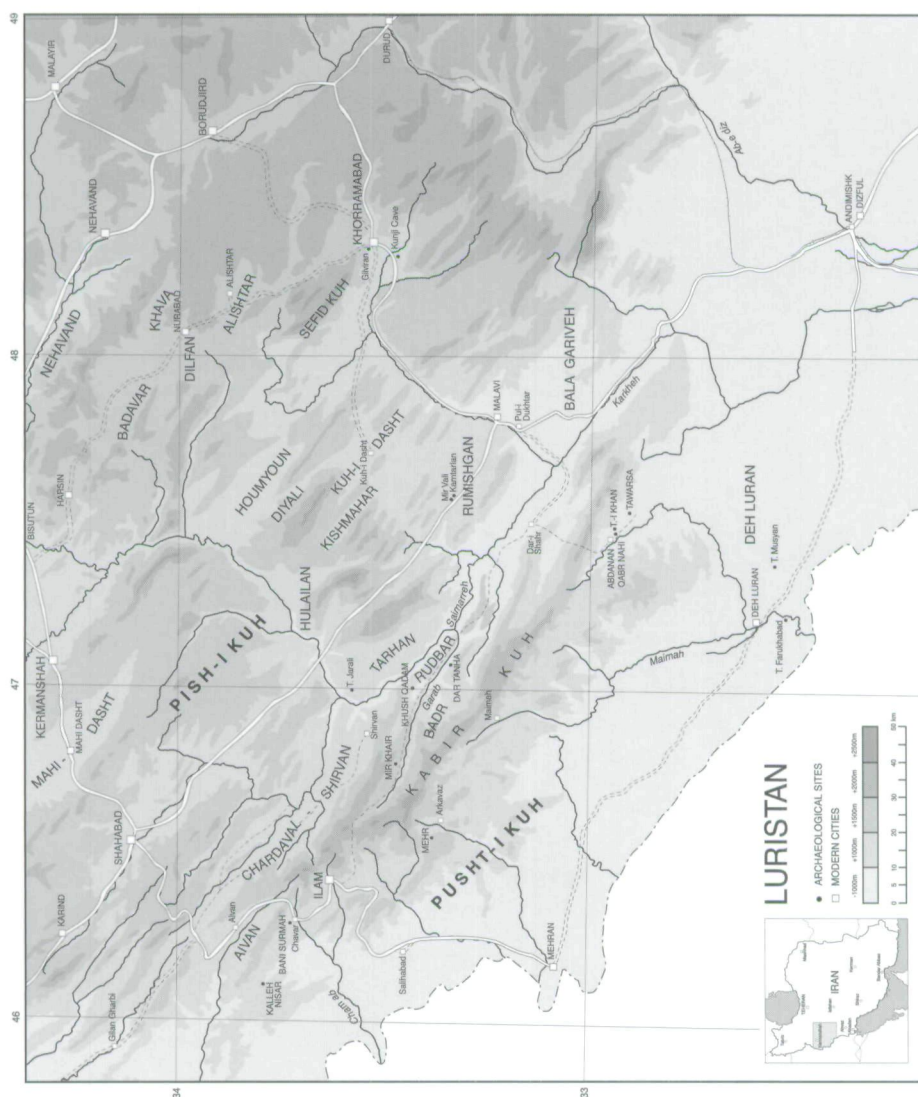
- LEVINE, L. & YOUNG, T.C., 1987. A summary of the ceramic assemblages of the central western Zagros from the middle Neolithic to the late third millennium B.C., in: Huot J.-L. (ed.), *Préhistoire de la Mésopotamie*, Paris: 15-53.
- LLOYD, S. & SAFAR, F., 1942. Tell Uqair, *Journal of Near Eastern Studies* 2: 131-155.
- MADJIDZADEH, Y., s.d. Excavations at Ozbaki (1378-1377) (in Persian), Tehran.
- MATTHEWS, R., 2002. *Secrets of the Dark Mound Jemdet Nasr 1926-2002* (= Iraq Archaeological Report 6), Warminster.
- MECQUENEM, DE R., 1912. Catalogue de la céramique peinte susienne conservée au Musée du Louvre, *Mémoires de la Délégation en Perse* XIII, Paris: 105-158.
- , 1934. Fouilles de Suse 1929-1933, *Mémoires de la Délégation Archéologique en Perse* XXV, Paris: 177-237.
- MEYER, J.W., 1983-84. Review of E. Carter, Cahier de la DAFI 11, 1980, *Archiv für Orientforschung* XXIX-XXX: 138-142.
- MOON, J.A., 1986. The Lower Diyala and the Hamrin Basin: Ceramic Relations during the Early Third Millennium, in: Finkbeiner U. & Röhl J. (eds.), *Ĝemdet Našr. Period or Regional Style?*, Wiesbaden: 112-120.
- MOOREY, P.R.S., 1994. *Ancient Mesopotamian Materials and Industries. The Archaeological Evidence*, Oxford.
- NAGEL, W., 1964. *Djamdat Našr-Kulturen und fröhdyastische Buntkeramiker* (= Berliner Jahrbuch für Vor- und Frühgeschichte vol. 8), Berlin.
- NEELY, J.A. & WRIGHT, H.T., 1994. *Early Settlement and Irrigation on the Deh Luran Plain. Village and Early State Societies in Southwestern Iran* (University of Michigan Museum of Anthropology – Technical Report 26), Ann Arbor.
- NICHOLAS, I. M., 1990. *The Proto-Elamite Settlement at TUV* (= University Museum Monograph 69. Malyan Excavation Reports vol. I) (W.M. Sumner ed.), Philadelphia.
- NOKHANDEH, J., 2004. in: Shahmirzadi S.M. (ed.), *The Potters of Sialk. Sialk Reconsideration Project, Report n° 3*, Tehran: 41-53 (in Persian section).
- PORADA, E., HANSEN, D.P., DUNHAM, S. & BABCOCK, S.H., 1992. The Chronology of Mesopotamia, ca. 7000-1600 B.C., in: Ehrich R.W. (ed.), *Chronologies in Old World Archaeology*, 3<sup>rd</sup>. Edition, Chicago: vol. I: 77-124; vol. II: 90-124.
- POSTGATE, N., 1986. The transition from Uruk to Early Dynastic: continuities and discontinuities in the record of settlement, in: Finkbeiner U. & Röhl J. (eds.), *Ĝemdet Našr. Period or Regional Style?*, Wiesbaden: 90-106.
- POTTIER, E., 1912. Etude historique et chronologique sur les vases peints de l'Acropole de Suse, *Mémoires de la Délégation en Perse* XIII, Paris: 27-103.
- POTTS, D.T., 2001. *Excavations at Tepe Yahya, Iran 1967-1975. The Third Millennium* (American School of Prehistoric Research Bulletin 45. Peabody Museum of Archaeology and Ethnology Harvard University) (C.C. Lamberg-Karlovsky ed.), Cambridge.

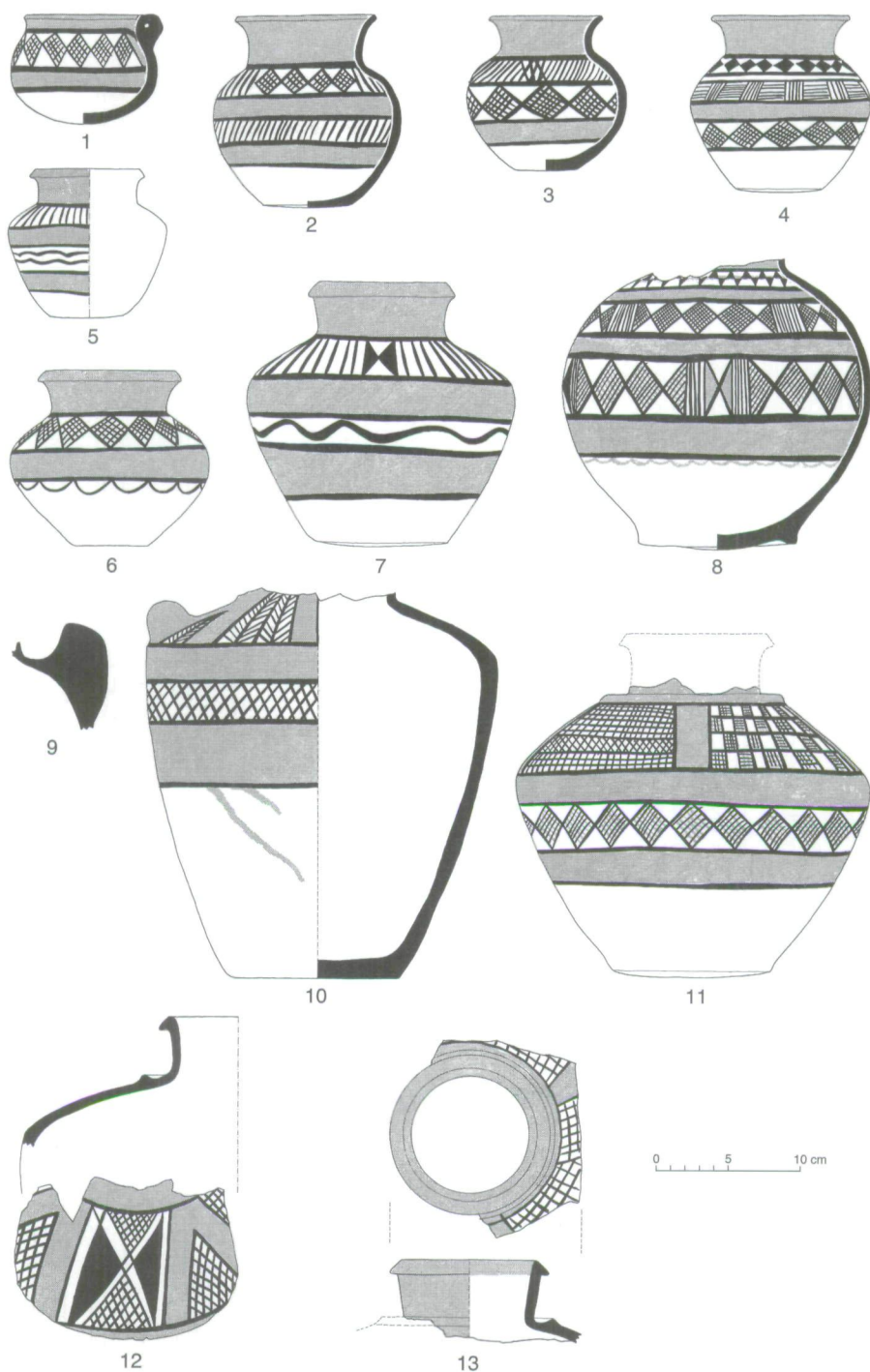


- , 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*, Cambridge.
- POTTS, T.F., 1994. *Mesopotamia and the East. An Archaeological and Historical Study of Foreign Relations 3400-2000 B.C.* (= Oxford University Committee for Archaeology Monograph 37), Oxford.
- RUMAIDH, S.S., 2000. *Excavations in Chokha. An Early Dynastic Settlement*, EDUBBA 8, London.
- SCHMIDT, E.F., 1937. *Excavations at Tepe Hissar (Damghan)*, Philadelphia.
- SCHMIDT, E.F., VAN LOON, M.N. & CURVERS, H.H., 1989. *The Holmes Expedition to Luristan* (= Oriental Institute Publications 108), Chicago.
- SPETH, J.D., 1971. Kunji Cave, Iran XIII: 172-173.
- STEINKELLER, P., 2007. New Light on Šimaški and Its Rulers, *Zeitschrift für Assyriologie und Vorderasiatische Archäologie*, Bd. 97: 215-232.
- STEVE, M.J. & GASCHE, H., 1971. *L'Acropole de Suse* (= Mémoires de la Mission Archéologique en Iran, Mission de Susiane XLVI), Paris.
- STÖLLNER, Th., SLOTTA, R. & VATANDOUST, A., (eds.), 2004. *Persiens Antike Pracht. Bergbau — Handwerk — Archäologie. Katalog der Ausstellung des Deutschen Bergbau-Museums Bochum vom 28. November 2004 bis 29. Mai 2005*, Bochum: 2 vols.
- SÜRENHAGEN, D., 1981. Ahmad al-Hattu 1979/1980, *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 113: 35-51.
- TALLON, F., 1987. *Métallurgie susienne I. De la Fondation de Suse au XVIII<sup>e</sup> siècle avant J.C.* (= Musée du Louvre, Département des Antiquités orientales. Notes et Documents des Musées de France 15), Paris.
- THRANE, H., 1965. Archaeological Investigations in Western Luristan, Preliminary report of the second Danish Archaeological Expedition to Iran, *Acta Archaeologica* XXXV: 153-169.
- , 1968. Bronzerne fra Luristan – og et dansk pionerarbejde, *Nationalmuseets arbejdsmark* 1968: 5-26.
- , 1970. Tepe Guran and the Luristan Bronzes, *Archaeology* 23 n° 1: 26-35.
- THUESEN, I., 1981. Early Dynastic Pottery from Tell Razuk, in: Gibson McG. (ed.), *Uch Tepe I: Tell Razuk, Tell Ahmed al-Mughir, Tell Ajamat* (= *Hamrin Report* 10), Chicago/Copenhagen: 99-143.
- TÜNÇA, Ö., 1987. *Tell Sabra* (= *Akkadica Supplementum* V), Leuven.
- VANDEN BERGHE, L., 1972. Recherches archéologiques dans le Luristan. Cinquième campagne 1969. Prospection dans le Pusht-i Kuh Central, *Iranica Antiqua* IX: 1-48.
- , 1979. La nécropole de Mir Khair au Pusht-i Kuh, Luristan, *Iranica Antiqua* XIV: 1-37.
- VANDEN BERGHE, L., DE WULF, B. & HAERINCK, E., 1979. *Bibliographie analytique de l'Archéologie de l'Iran Ancien*, Leiden.
- VANDEN BERGHE, L. & HAERINCK, E., 1981. *Bibliographie analytique de l'Archéologie de l'Iran Ancien. Supplément 1: 1978-1980*, Leiden.

- , 1987. *Bibliographie analytique de l'Archéologie de l'Iran Ancien. Supplément 2: 1981-1985*, Leuven.
- VAN LOON, M.N., 1981. Review of M.-J. Steve & H. Gasche, 1971, *Bibliotheca Orientalis* XXXVIII, n° 5/6: 707-716.
- VOIGT, M.M. & DYSON, R.H., 1992. The Chronology of Iran, ca. 8000-2000 B.C., in: Ehrich R.W. (ed.), *Chronologies in Old World Archaeology*, 3<sup>rd</sup>. Edition, Chicago: vol. I: 122-138; vol. II: 125-153.
- WILSON, K., 1986. Nippur: The Definition of a Mesopotamian Gemdet Nasr Assemblage, in: Finkbeiner U. & Röllig J. (eds.), *Gemdet Nasr. Period or Regional Style?*, Wiesbaden: 57-89.
- WRIGHT, H.T., 1981. *An Early Town on the Deh Luran Plain. Excavations at Tepe Farukhabad*, (= Memoirs of the Museum of Anthropology. University of Michigan n° 13), Ann Arbor.
- , 1987. The Susiana hinterlands during the era of primary state formation, in: Hole F. (ed.), *The Archaeology of Western Iran*, Washington: 141-155.
- WRIGHT, H.T. & RUPLEY, E.S., 2001. Calibrated radiocarbon age determinations of Uruk-related assemblages, in: Rothman M.S. (ed.), *Uruk Mesopotamia and its neighbors. Cross-cultural Interactions in the Era of State Formation*, Sante Fe & Oxford: 85-122.
- YOUNG, T.C. & LEVINE, L., 1974. *Excavations of the Godin Project: Second Progress Report*. (Occasional Paper n° 26, Royal Ontario Museum of Art and Archaeology), Toronto.

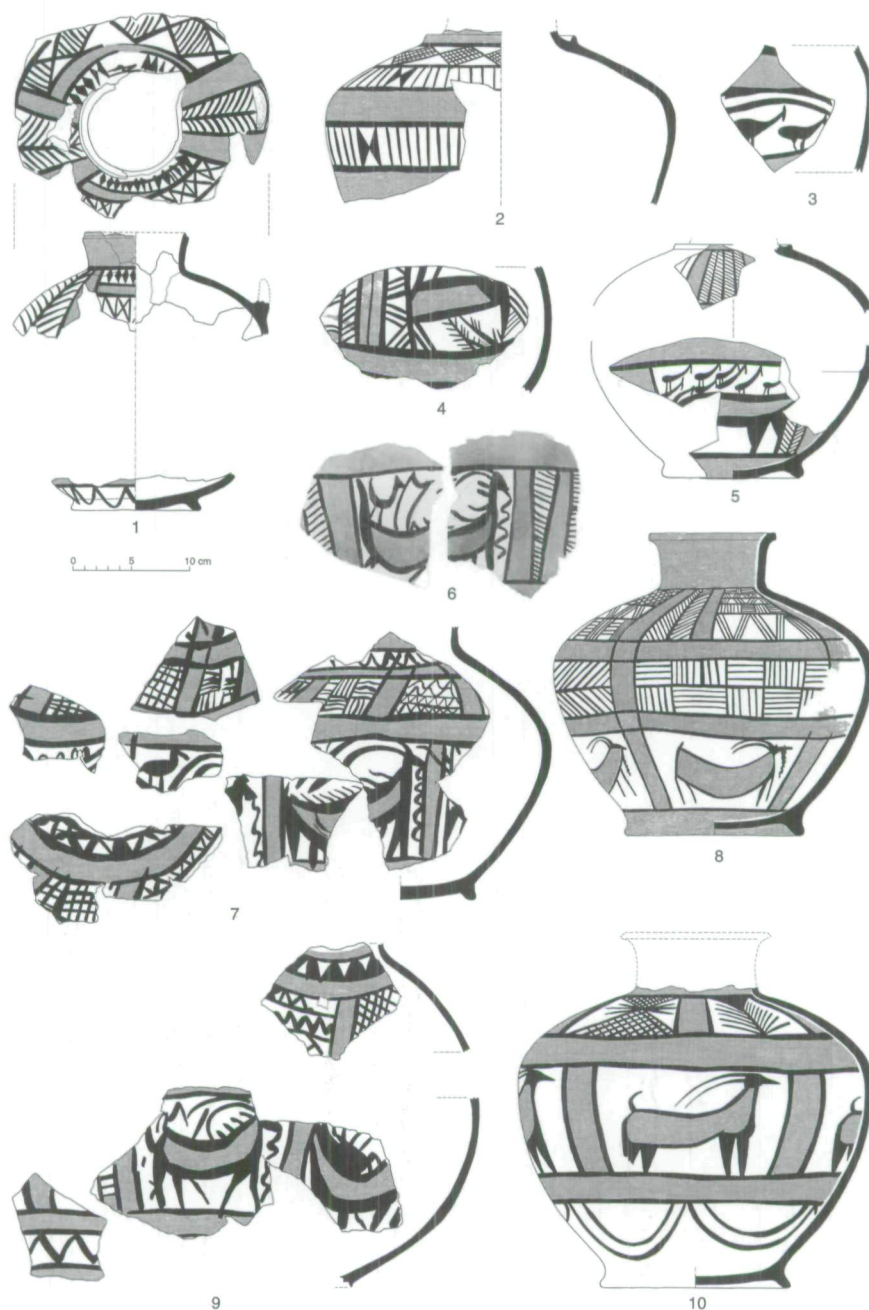




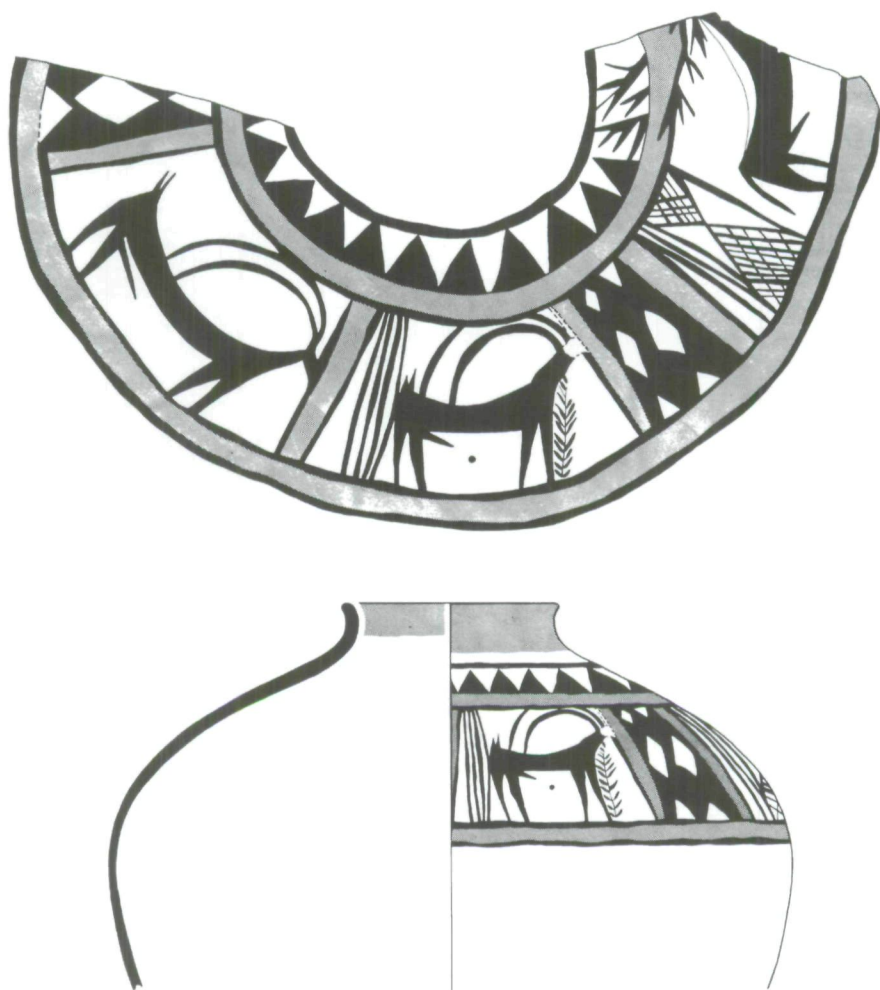


Pl. 2. Bichrome/polychrome pottery of the Early Bronze Age I in Western Pusht-i Kuh from Bani Surmah (n°1) (after Haerinck & Overlaet 2006, fig 11 n° 1) and Kalleh Nisar AI (n° 2-13) (after Haerinck & Overlaet 2008, fig. 12).





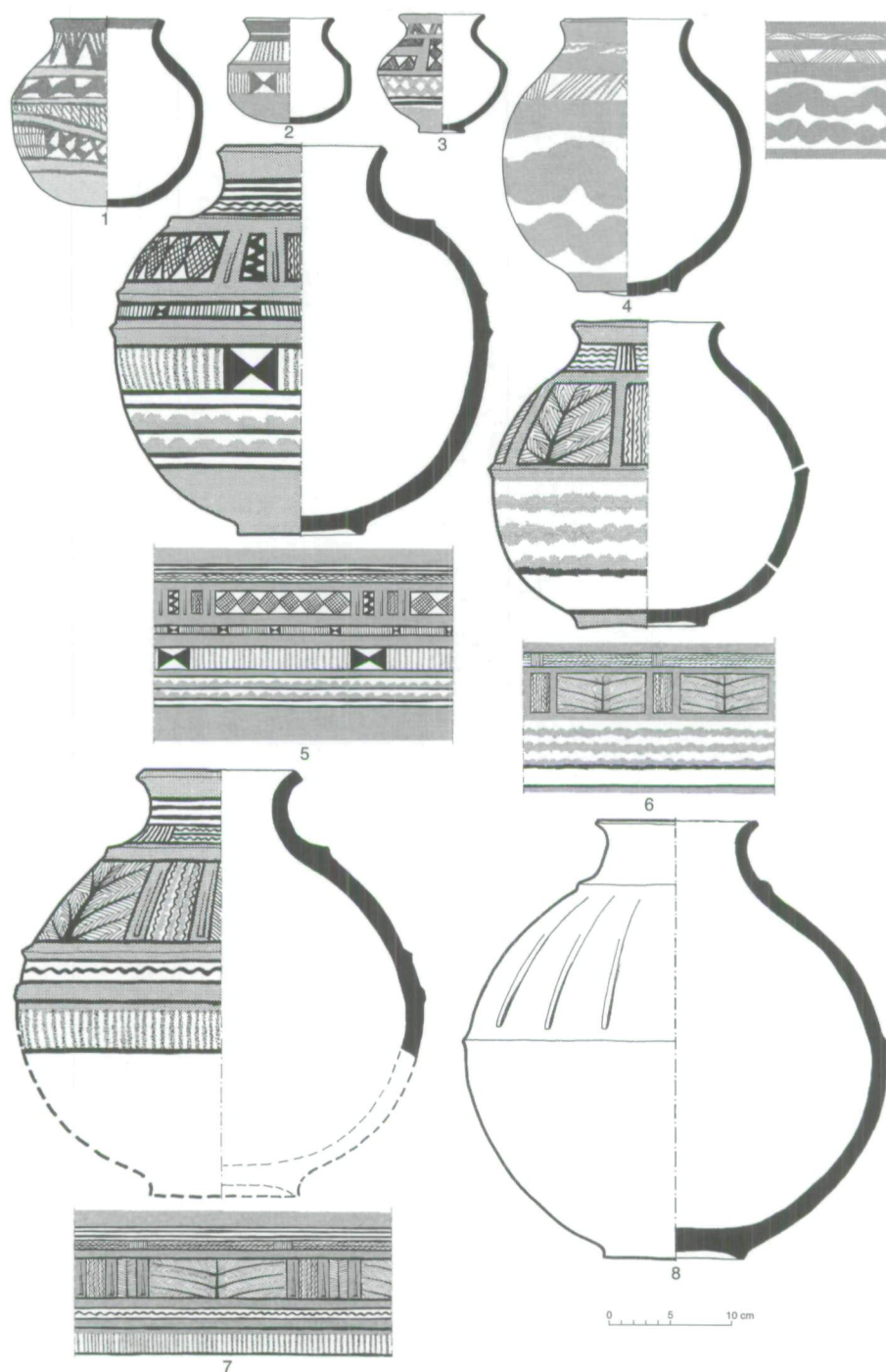
Pl. 3. Bichrome/polychrome pottery of the Early Bronze Age II in Western Pusht-i Kuh from Bani Surmah (n° 1-3, 5, 7, 9 & 10) (after Haerinck & Overlaet 2006, fig. 11 & 12) and Kalleh Nisar C (n° 4, 6 & 8) (after Haerinck & Overlaet 2008, fig. 13).



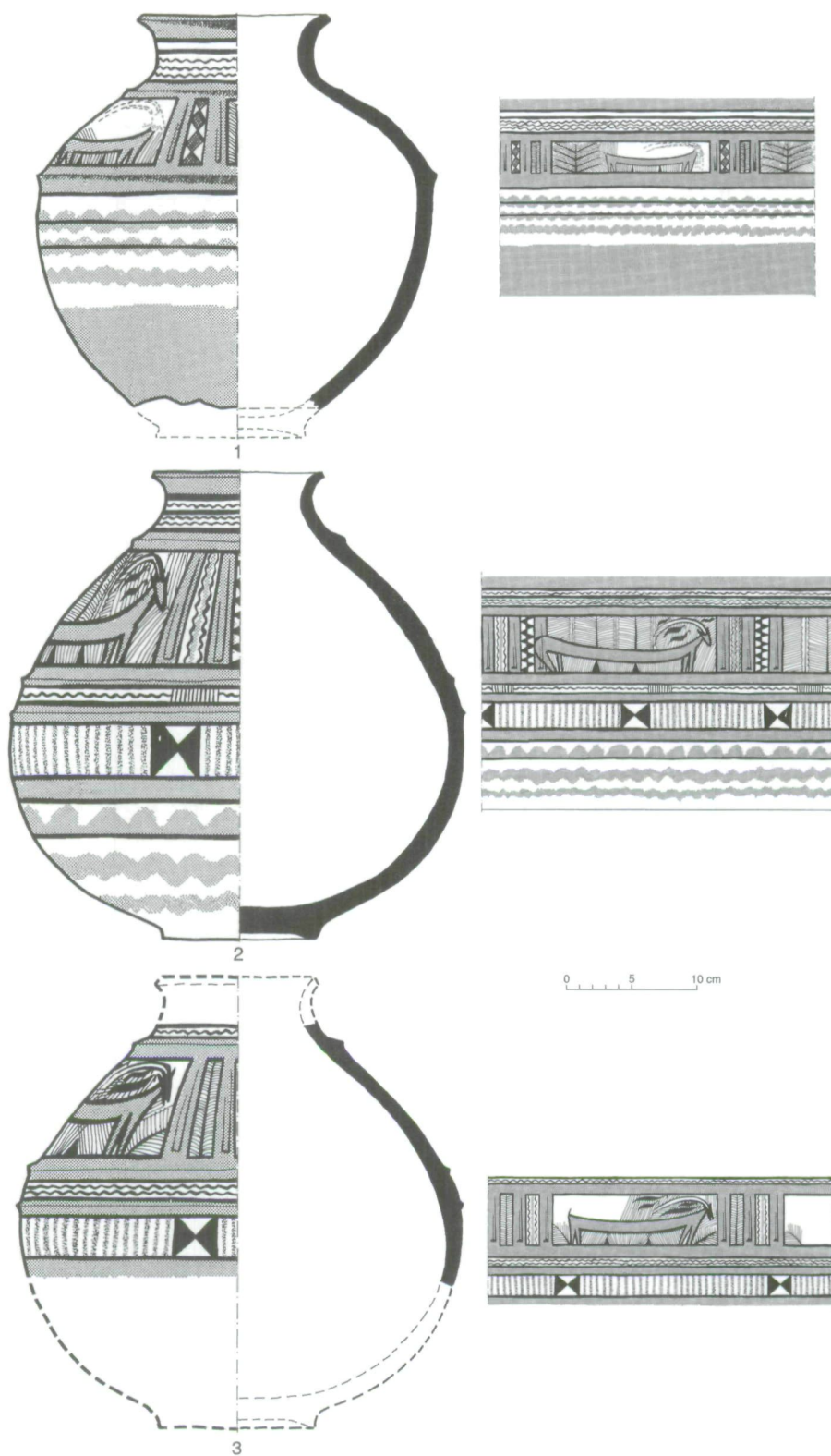
0 5 10 cm

Pl. 4. Bichrome/polychrome vessel from Chogha Maran (Mahi Dasht)  
(after Levine & Young 1987: 46, fig. 26).





Pl. 5. Bichrome/polychrome pottery of the "Mussian style" from Abdanan  
(Qabr Nahi: n° 2, 4-8; Tawarsa: n° 1 & 3).

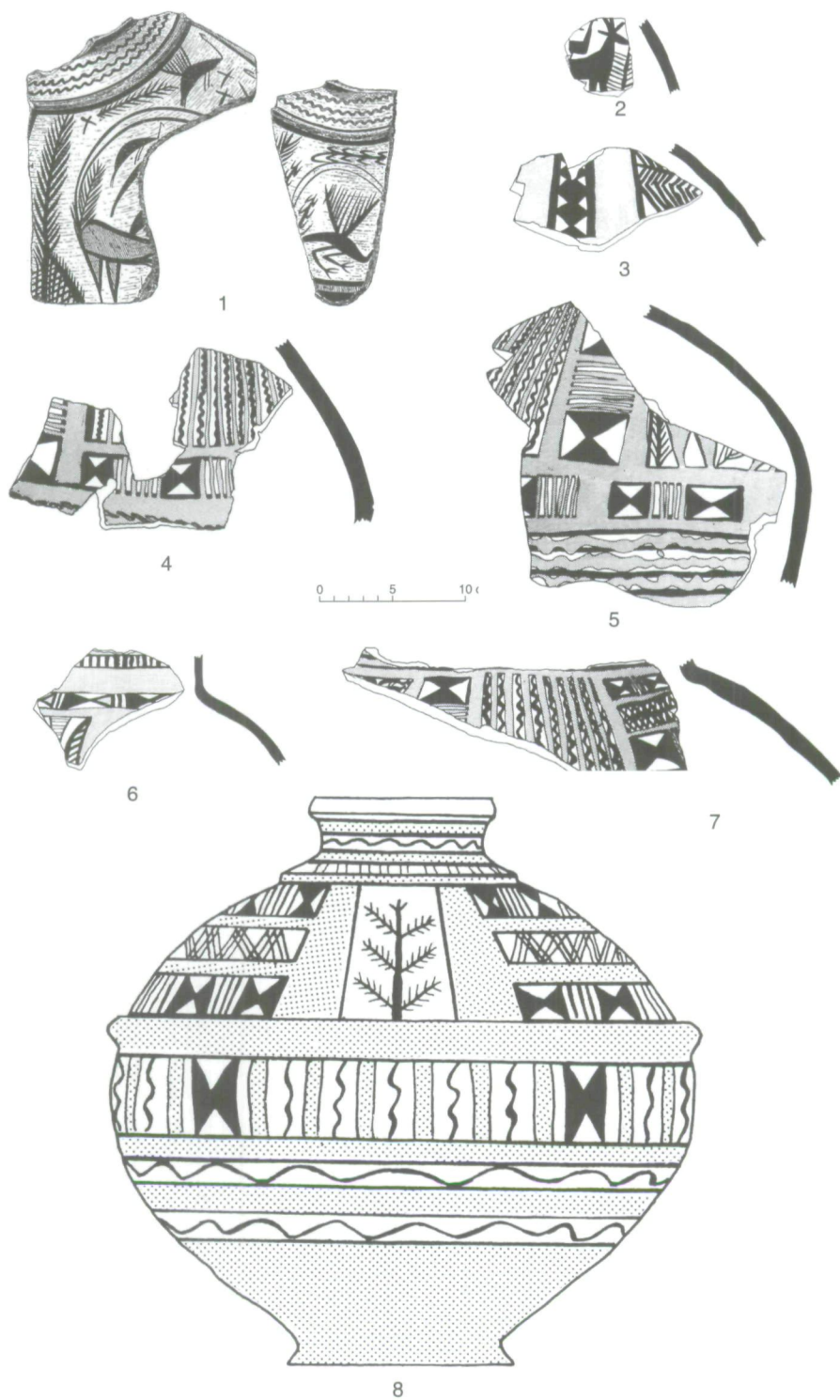


Pl. 6. Bichrome/polychrome pottery of the "Mussian style" from Abdanan  
(Pusht-i Qaleh Abdanan: n° 1; Qabr Nahi: n° 2-3).





Pl. 7. Bichrome/polychrome pottery of the "Mussian style": n° 1 & 2: from Susa (after Carter 1987: 77, fig. 2 c & d); n° 3: Aliabad (Deh Luran) (after Gautier & Lampre 1905: Pl. VII) and n° 4: Farukhabad (Deh Luran) (after Wright 1981: Pl. I).



Pl. 8. Bichrome/polychrome ware from Deh Luran (n° 1: Khazineh after Gautier & Lampre 1905: 129, fig. 250-251; n° 2-8: Farukhabad after Wright 1981: Pl. 59a; 60a,f&q; 61i&m).

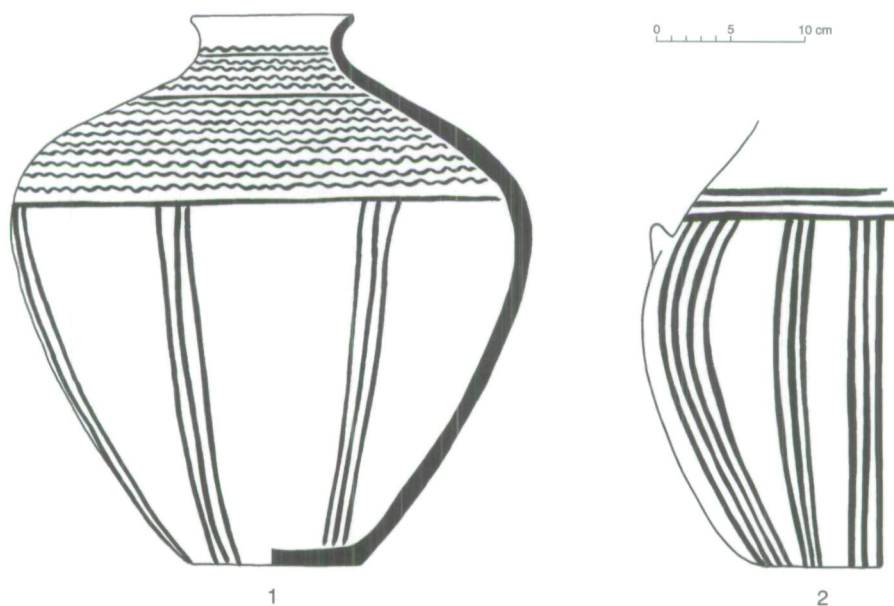
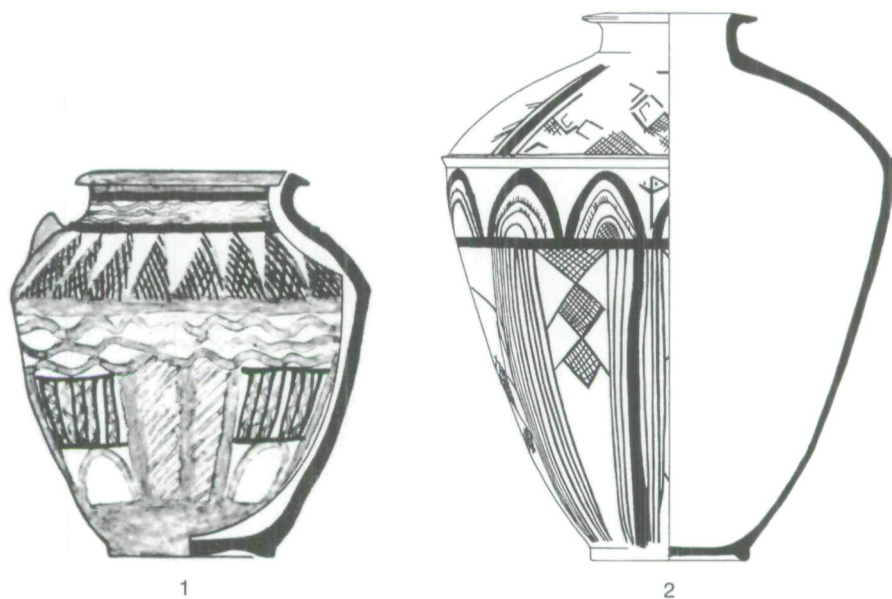




Pl. 9. Bichrome/polychrome pottery from Mir Vali (Rumishgan) (n° 1: Tomb II; n° 2: Tomb IV) (after Schmidt, van Loon & Curvers 1989: Pl. 89 & 90)

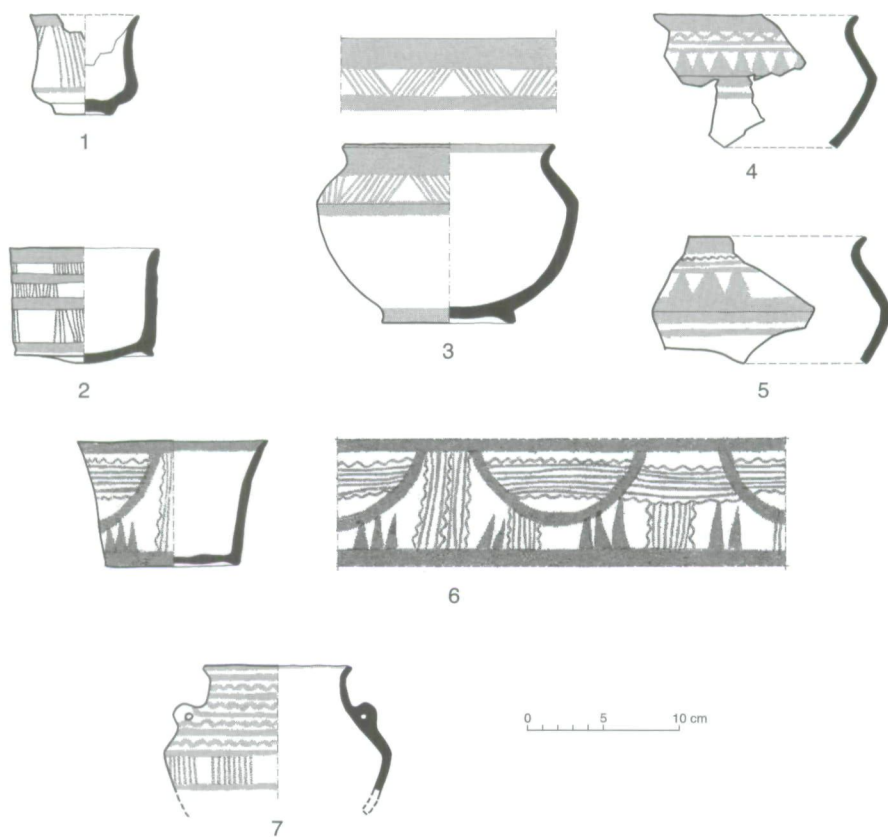


Pl. 10. Bichrome/polychrome pottery of "Aliabad style" from Deh Luran (n° 1-4: Farukhabad after Wright 1981: Pl. 59c, e, h & f; n° 5-6: Aliabad, after Gautier & Lampre 1905: fig. 284 & 285; n° 7: after Carter 1987: 76, fig. 1b).

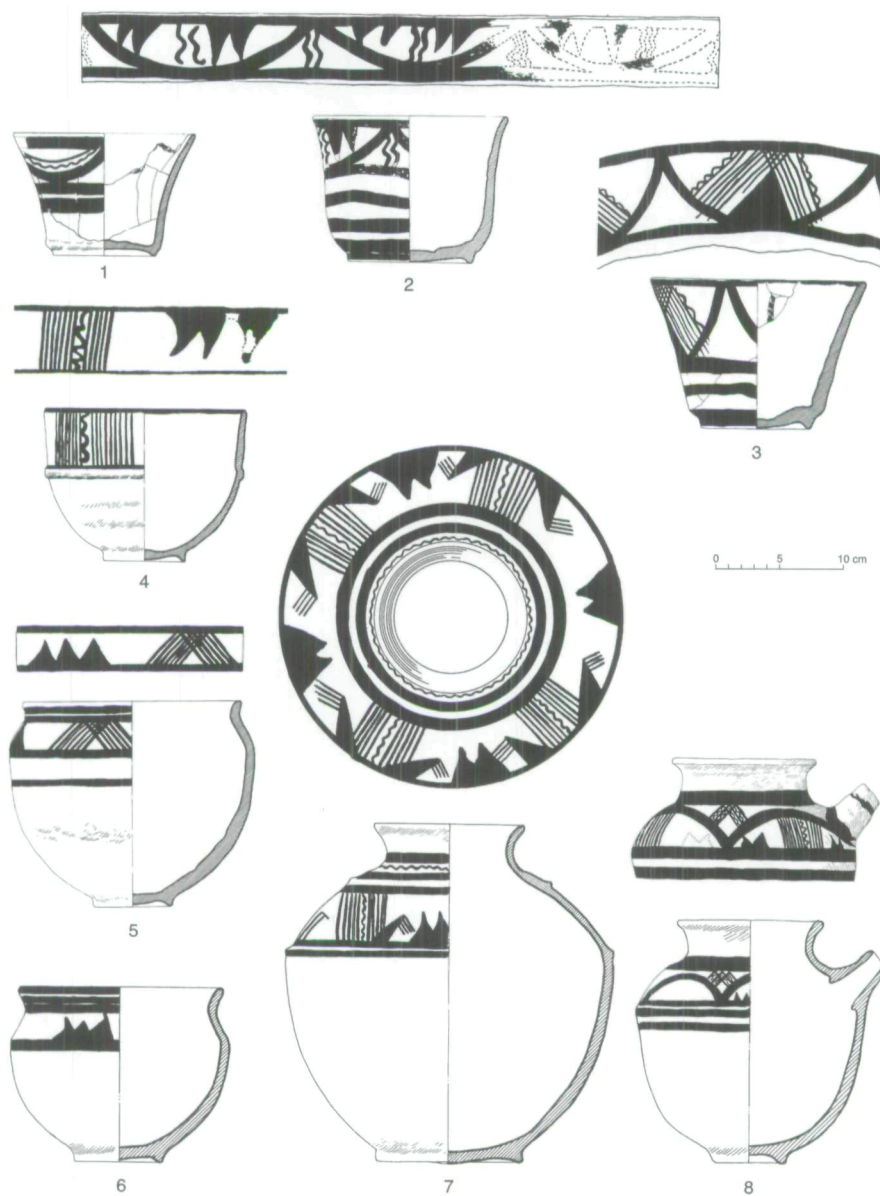


Pl. 11. Top row: bichrome/polychrome pottery of "Aliabad style": n° 1 from Susa: after Carter 1987: 77, fig. 2b; n° 2: Ahmad al-Hattu (Hamrin/Iraq): after Eickhoff 1993: xxx n° 93; bottom row: monochrome pottery: n° 1 from Kalleh Nisar AI: after Haerinck & Overlaet 2008: fig. 11; n° 2: Bani Sol: after Haerinck & Overlaet 2010, Pl. 1.

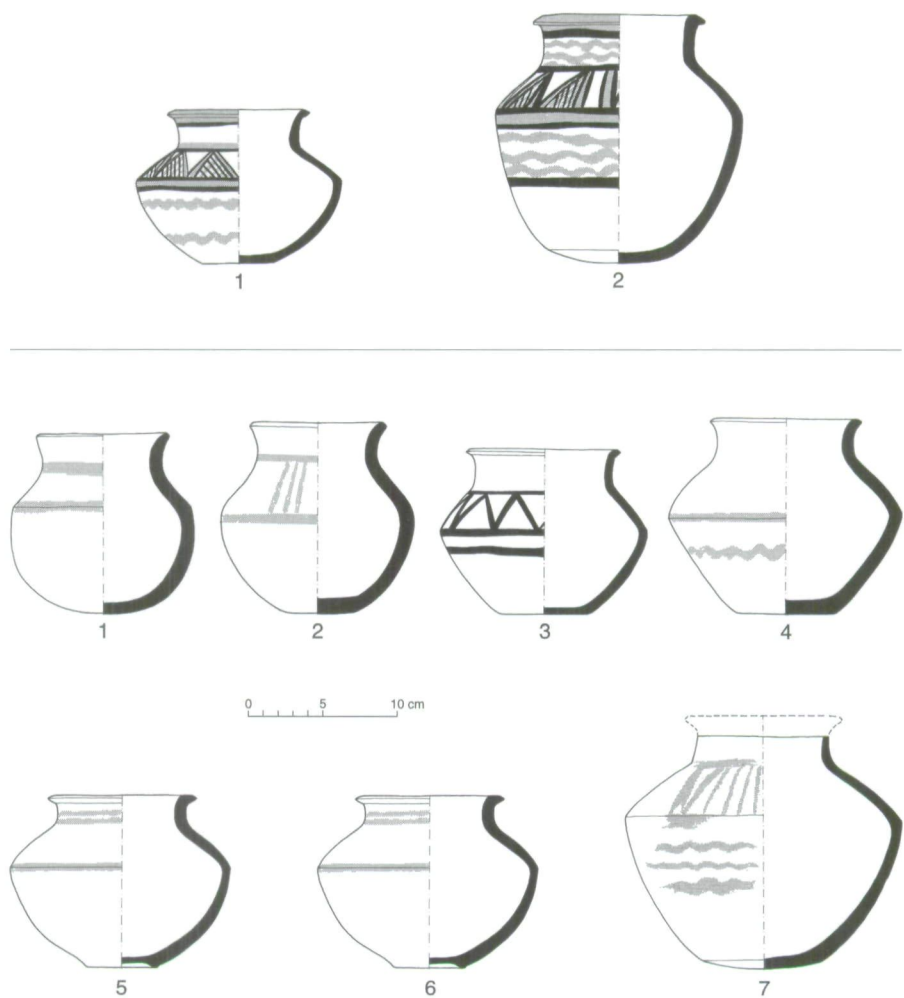




Pl. 12. Monochrome pottery from Abdanan (Qabr Nahi: n° 1-2, 4-5; Pusht-i Qaleh Abdanan: n° 3; Tawarsa: n° 6; Takht-i Khan: n° 7).

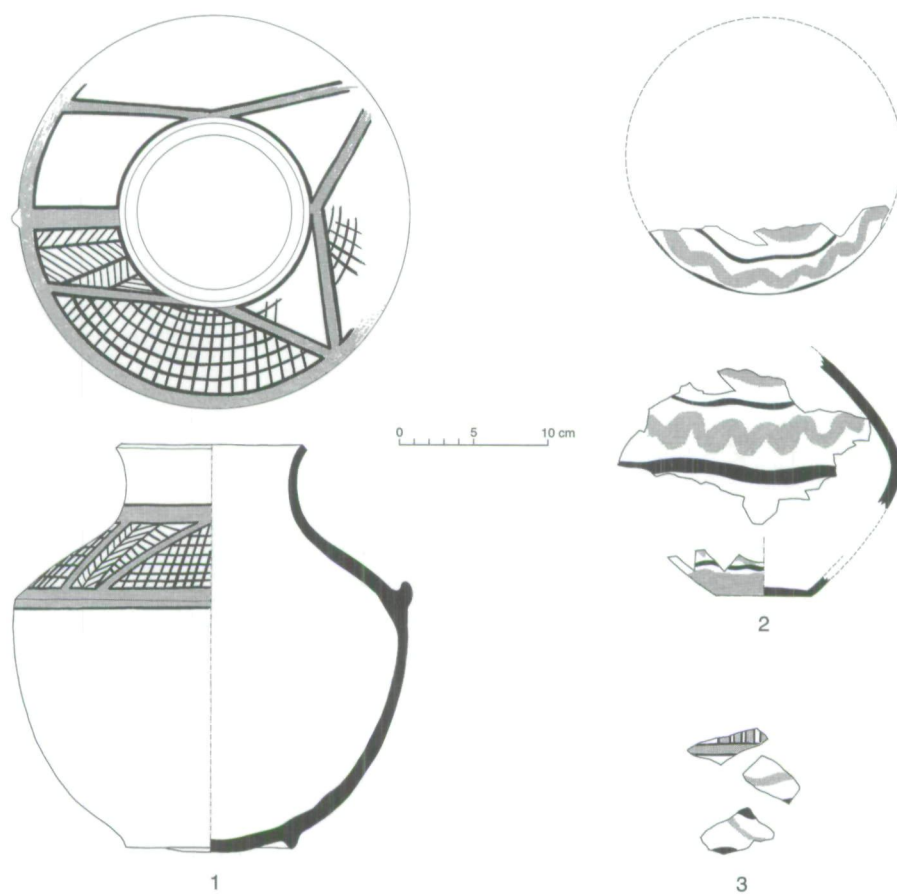


Pl. 13. Monochrome pottery from Mir Vali (Rumishgan) (n° 1: Tomb 4; n° 2-8: Tomb 2)  
 (after Schmidt, van Loon & Curvers 1989: Pl. 79 e, g, h; Pl. 81b, d, c; Pl. 85b;  
 Pl. 86 b&c).

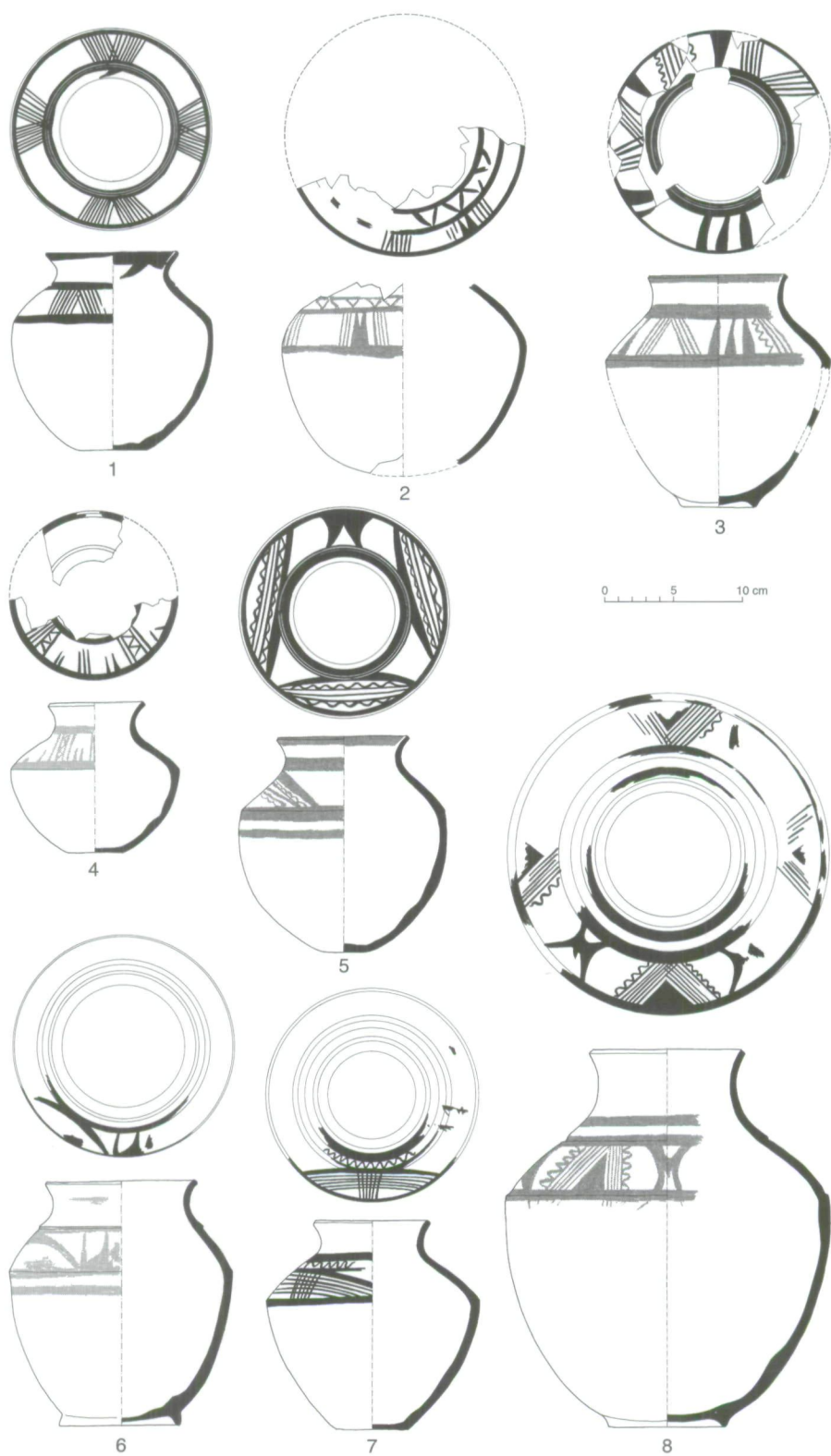


Pl. 14. Mir Khair (Badr): bichrome/polychrome (top) pottery and monochrome pottery (bottom).

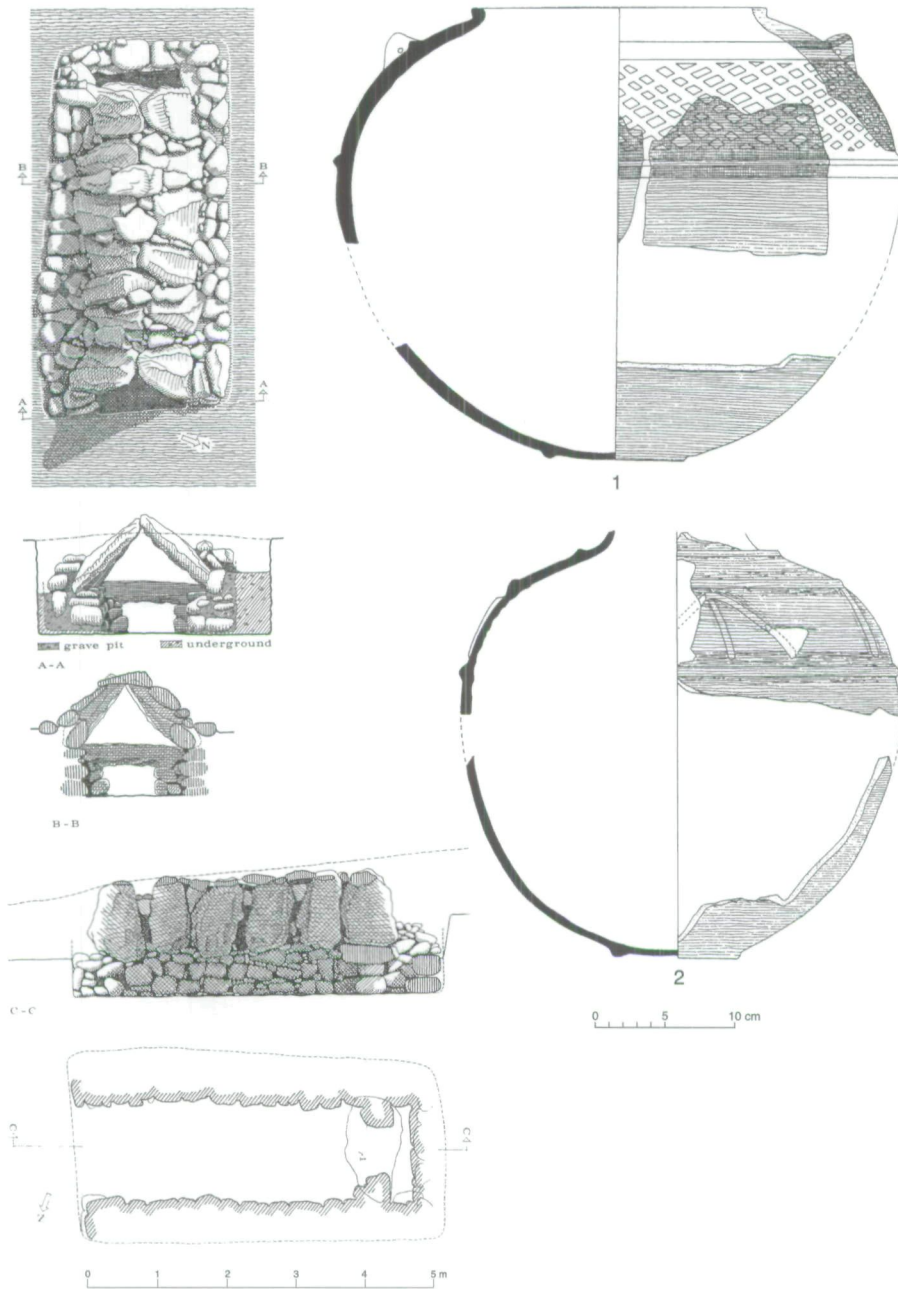




Pl. 15. Bichrome/polychrome pottery from Dar Tanha (Badr) (All tomb 1).

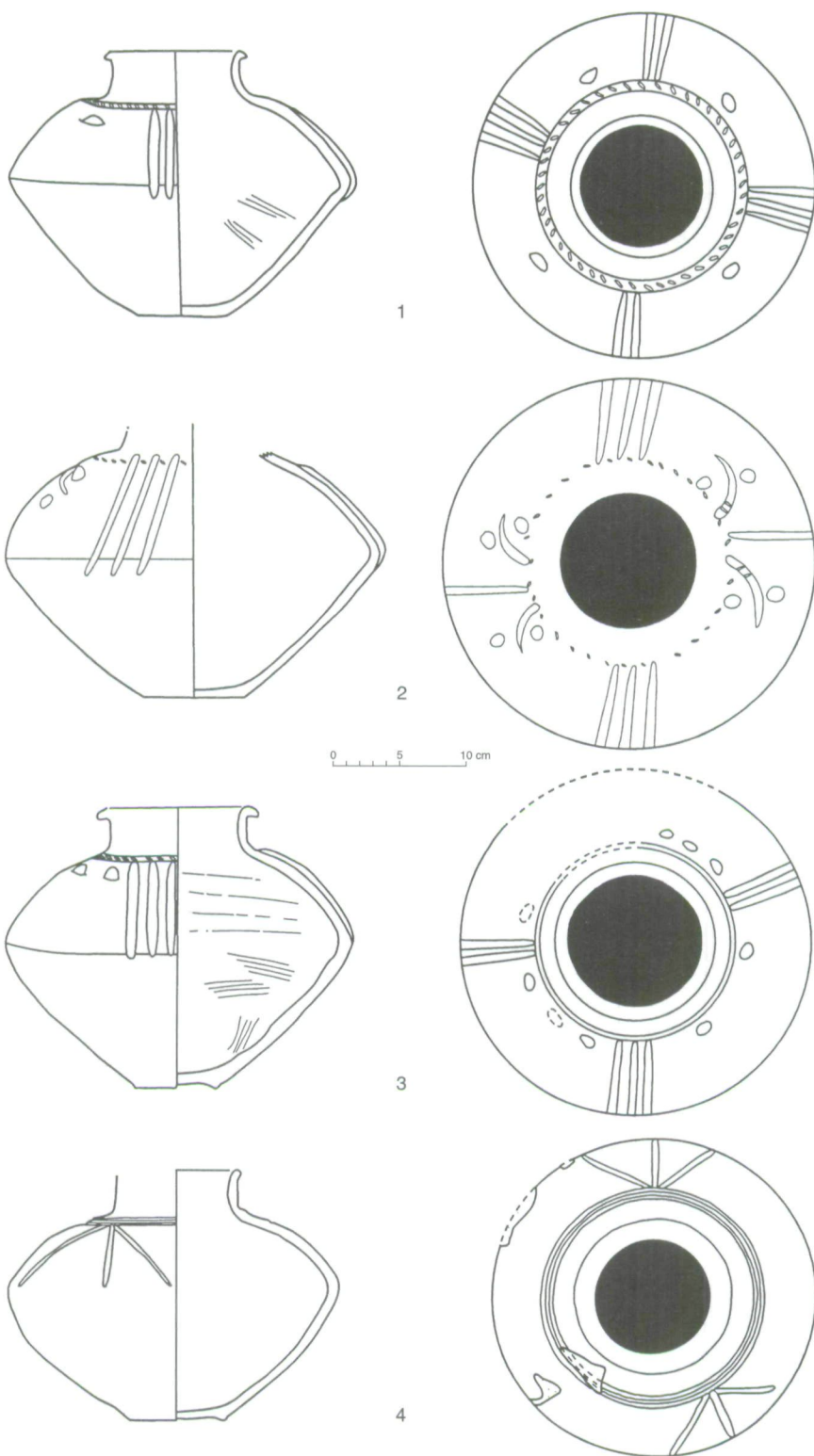


Pl. 16. Dar Tanha (Badr): monochrome pottery (All tomb 1).

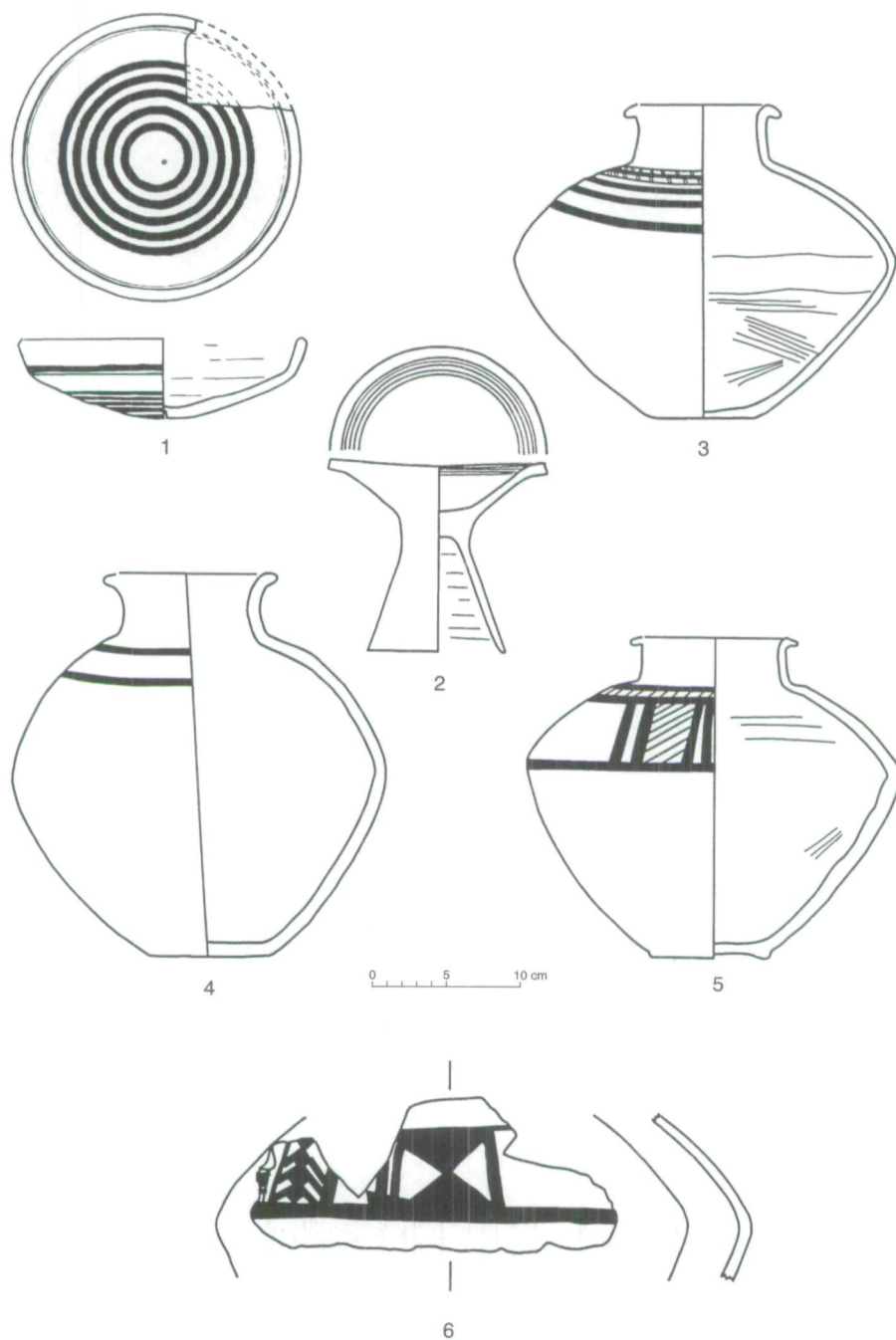


Pl. 17. Tepe Jarali (Tarhan) (after Thrane 1965: 166-167, fig. 12 & 13).

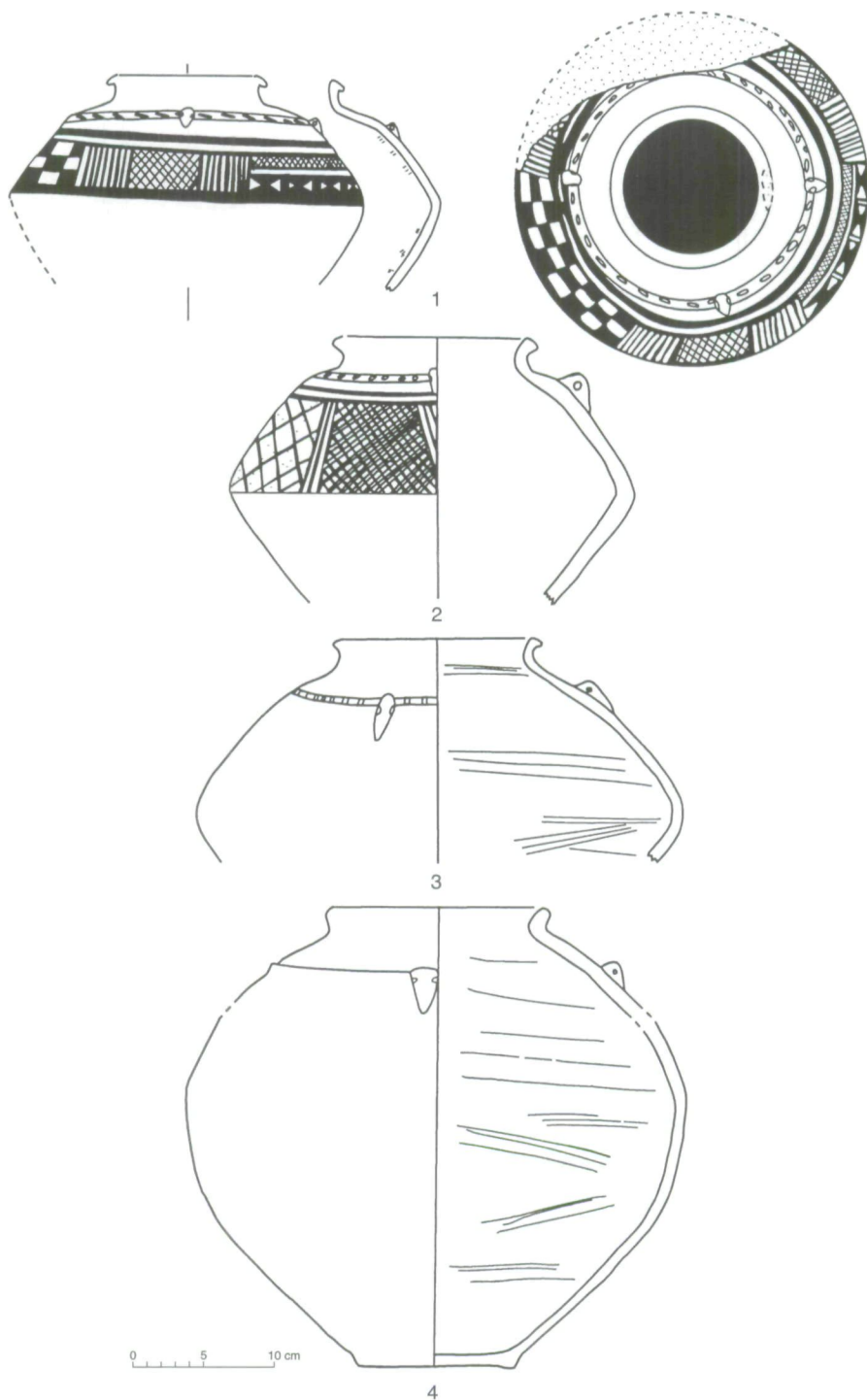




Pl. 18. Kunji (Khorramabad) (after Emberling e.a. 2002: fig. 10a; 20a; 25b & 21a)

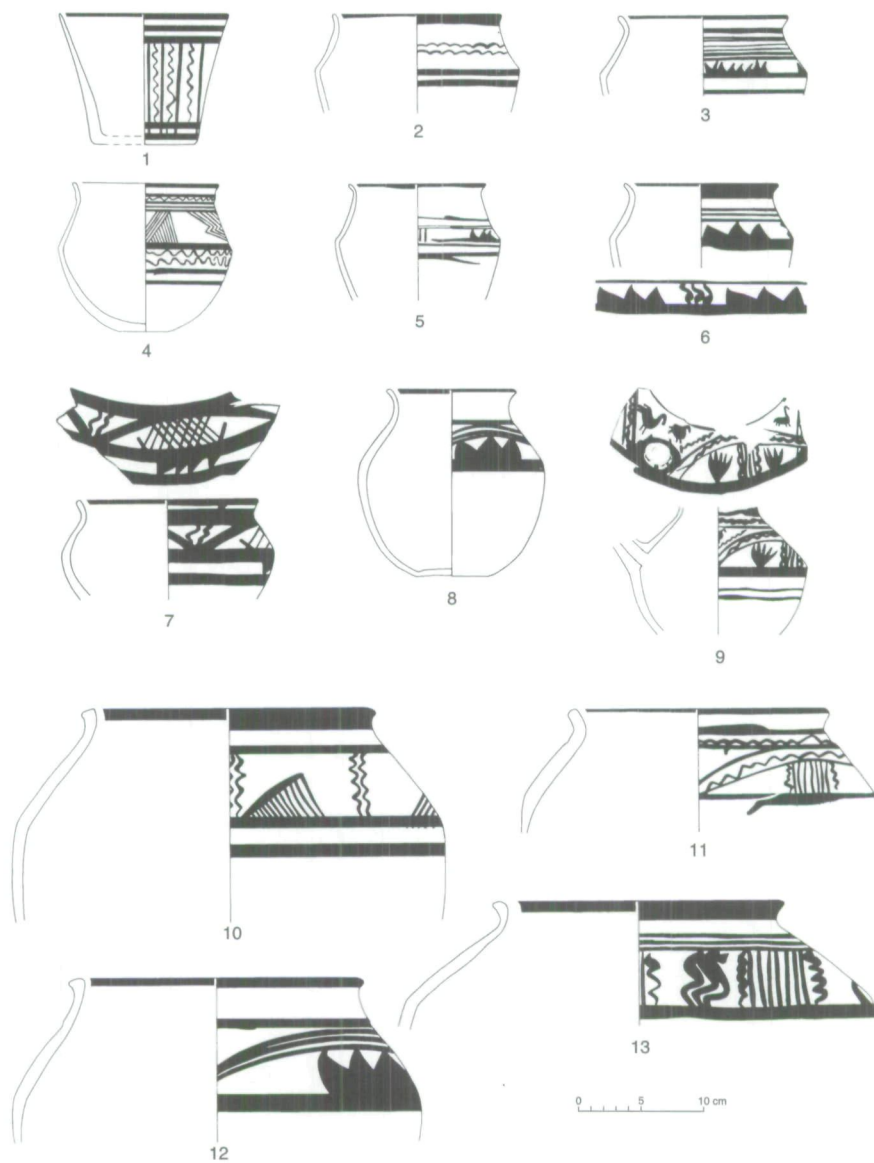


Pl. 19. Kunji (Khorramabad) (after Emberling e.a. 2002: fig. 15a; 27d; 11b; 11a; 8a; 27a).

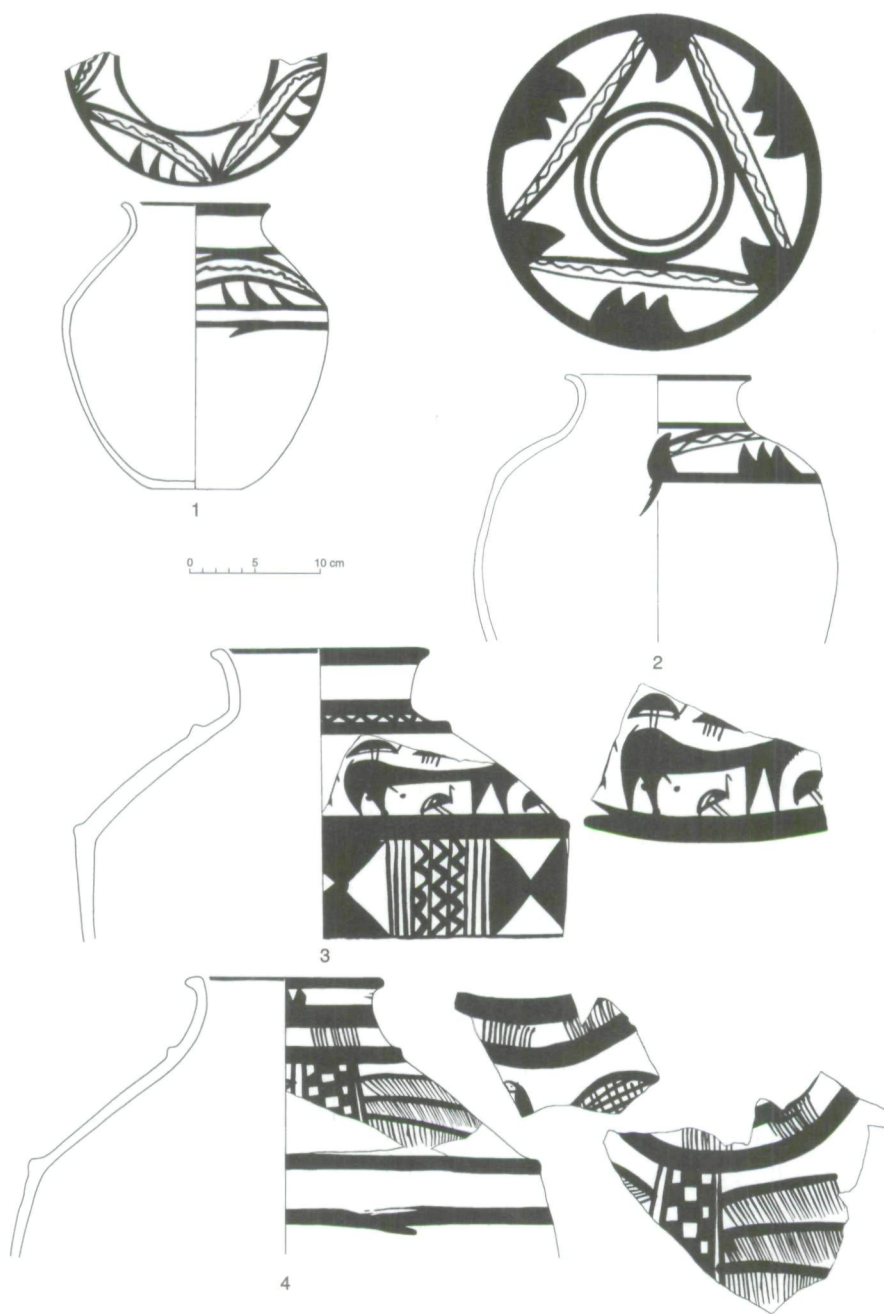


Pl. 20. Kunji (Khorrambad) (after Emberling e.a. 2002: fig. 10b; 8b; 10d & 14a).





Pl. 21. Godin Tepe III:6 (monochrome pottery after Henrickson 1987a: fig. 4 n° 6-9, 27; fig. 5 n° 1, 15, 18; fig. 6 n° 2, 5, 6, 8; fig. 7 n° 4).



Pl. 22. Godin Tepe III:6 (monochrome pottery after Henrickson 1987a: fig. 7 n° 1 & 2; fig. 8 n° 2-3).

Copyright of Iranica Antiqua is the property of Peeters Publishers and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.